MICRO FOCUS

Messenger 18
Administration Guide

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About This Guide

This *GroupWise Messenger 18 Administration Guide* helps you configure and manage your GroupWise Messenger system.

- Chapter 1, "Understanding Your GroupWise Messenger System," on page 9
- Chapter 2, "Managing the Messaging Agent," on page 13
- Chapter 3, "Managing Messenger Client Users," on page 35
- Chapter 4, "Managing Messenger Mobile Applications," on page 57
- Chapter 5, "Enabling and Managing Archiving," on page 65
- Chapter 6, "Managing Chat Rooms," on page 87
- Chapter 7, "Integrating Micro Focus Vibe with GroupWise Messenger," on page 91
- Chapter 8, "Securing GroupWise Messenger," on page 93

Audience

This guide is intended for network administrators who administer Messenger.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the **comment on this topic** feature at the bottom of each page of the online documentation.

Documentation Updates

For the most recent version of the *GroupWise Messenger 18 Administration Guide*, visit the GroupWise Messenger 18 documentation website (http://www.novell.com/documentation/novell_messenger30/).

Additional Documentation

For additional Messenger documentation, see the *GroupWise Messenger 18 Installation Guide* at the GroupWise Messenger 18 documentation website (http://www.novell.com/documentation/novell_messenger30/).

1 Understanding Your GroupWise Messenger System

The following components make up your Messenger system:

- “Messaging Agent” on page 9
- “Archive Agent” on page 9
- “GroupWise Admin Console” on page 10
- “Database Objects” on page 10
- “Language Availability” on page 10

Messaging Agent

The Messaging Agent performs the following activities:

- Authenticates users to the Messenger system when they start the Messenger client, searches for contacts as users build their contact lists, saves users' option settings for the Messenger client, and so on
- Transfers instant messages back and forth between Messenger users
- Maintains presence information about Messenger users so that the Messenger client can show user availability status (such as online, busy, away, and idle)
- Passes conversations to the Archive Agent if archiving is enabled

The Messaging Agent is highly scalable. If you are setting up a large Messenger system, you should run the Messaging Agent on a dedicated server with a processor speed of 1-2 GHz and with 1 GB of RAM. The Messaging Agent has been tested to easily support 1000 active conversations on such hardware. If you assume that 2% of Messenger users might be conversing simultaneously, you could plan on your Messenger system including as many as 50,000 users. Although Messenger has not been tested with this many actual users, you can be confident that it can scale to meet the needs of a very large number of users. For more information on the Messaging Agent, see Chapter 2, “Managing the Messaging Agent,” on page 13.

Archive Agent

The Archive Agent performs the following activities:

- Grants authorized users access to the Messenger archive
- Receives completed conversations from the Messaging Agent and stores them in the Messenger archive
- Indexes the archived conversations so that they can be searched by authorized Messenger users
- Performs searches in the Messenger archive for authorized Messenger users
- Manages expiration of old conversations
- Repairs the Messenger archive in case of damage to its database

For more information on the Archive Agent, see Chapter 5, “Enabling and Managing Archiving,” on page 65.

GroupWise Admin Console

Messenger system administration is performed in the GroupWise Admin Console. During the Messenger install, you were prompted for the GroupWise Admin console information to set up the initial configuration of Messenger.

Database Objects

Messenger 18 uses the Arango database to store objects instead of eDirectory. When you create your Messenger system, the Messenger objects are created in the database and configured in the GroupWise Admin console. The objects created include: Messenger Service, Servers, Agents, Users, Chats, Hosts, and Policies.

Language Availability

You can run the Messenger Installation program, administer your Messenger system in the GroupWise Admin console, and run the Messenger agents in the following languages:

- English
- French
- German
- Spanish
- Portuguese

By default, the Messenger Installation program and the Messenger agents start in the language of the operating system, if it is available. If the operating system language is not available for Messenger, the next default language is English. In the Installation program, you can select from among the available languages to override the English default. When starting the Messenger agents, you can use the /language startup switch to override the English default on Windows servers.

You can run the Messenger client in the following languages:

- Czech
- Chinese - Simplified
- Chinese - Traditional
- Danish
- Dutch
- English
- Finnish
- French
- German
- Hungarian
- Italian
- Japanese

* Korean
* Norwegian
* Polish
* Portuguese
* Russian
* Spanish
* Swedish

Users can select the languages they want when they install the Messenger client.

By default, the Messenger client starts in the language of the operating system, if it is available. If the operating system language is not available, the next default language is English. In the Messenger client, you can click **Tools** > **Options**, then select an interface language from those that have been installed. When starting the Messenger client, you can use the /l startup switch to override the English default and select an interface language from those that have been installed.

2 Managing the Messaging Agent

The Messaging Agent is the heart of your Messenger system. To review its various roles, see “Messaging Agent” on page 9. The following sections help you manage and monitor the Messaging Agent in your Messenger system:

- “Starting the Messaging Agent” on page 13
- “Configuring the Messaging Agent” on page 13
- “Configuring Messaging Security with SSL Encryption” on page 15
- “Monitoring the Messaging Agent” on page 17
- “Optimizing Messaging Agent Performance” on page 22
- “Managing the Messaging Server” on page 22
- “Using Messaging Agent Startup Switches” on page 23

Starting the Messaging Agent

When you finish creating your Messenger system, the Installation program starts the Messenger agents for you. You can manually start, stop, restart, or check the status of the service it in a terminal window so status messages are displayed. In addition, you can monitor the Messaging Agent from your browser, as described in “Using the Messaging Agent Web Console” on page 17.

To start the Messaging Agent:

- ❒ At the Linux server, become root by entering `su` and the root password.
- ❒ Enter the following command:

```
systemctl start gwm-nmma.service
```

You can also use the stop, restart, and status options for the Messaging Agent using systemctl.

Messaging Agent log files are created in the `/var/opt/novell/log/messenger` directory. The Messaging Agent can be monitored using the agent Web Consoles from your browser, as described in “Using the Messaging Agent Web Console” on page 17.

Configuring the Messaging Agent

The advantage to configuring the Messaging Agent in the GroupWise Admin console as opposed to using startup switches in the Messaging Agent startup file, is that the Messaging Agent configuration settings are stored in eDirectory.

- ❒ In the GroupWise Admin console > Messenger > MessengerService > Messaging Agents > select the Messaging Agent

Table 2-1 summarizes the Messaging Agent configuration settings in the Messaging Agent object property pages and how they correspond to Messaging Agent startup switches (as described in “Using Messaging Agent Startup Switches” on page 23):

Table 2-1 Messaging Agent Configuration Settings in the Messaging Agent Object Property Pages

GroupWise Admin console Properties Pages and Settings	Corresponding Tasks and Startup Switches
General Page	Displays general information about the Messaging agent, including the object name, version, working path, and if the services and SNMP are enabled.
Work Path	See “Moving the Messaging Agent Working Directory” on page 23.
Enable Messenger Services	Turns on and turns off the availability of instant messaging for all Messenger users.
Enable SNMP	See “Using SNMP Monitoring Programs” on page 20. See also /nosnmp.
Agent Settings	
TCP/IP Address Client/Server Port Description Bind to This Address	Displays the Messaging Agent server information established during installation.
HTTP User Name, Password, and port	See “Setting Up the Messaging Agent Web Console” on page 17. See also /httpport, /httpuser, /httppassword, and /httpssl.
Queue Path	See “Moving the Messaging Agent Conversation Holding Queue” on page 73.
Enable NPNS for mobile devices	See “Configuring Novell Push Notification Service” on page 60
Maximum Number of Users Client/ Server Threads Default Number of Connections Idle TImeout Maximum Number of Connections Maximum Query Results	See “Optimizing Messaging Agent Performance” on page 22.
Log Settings	
Log Level Enable Disk Logging Log Files Path Log Maximum Age Log Maximum Size	See “Using Messaging Agent Log Files” on page 19. See also /loglevel, /log, /logdays, /logmax, and /logdiskoff.
SSL Settings	
Certificate Path SSL Certificate SSL Key File Set Password Enable SSL for Client/Server Enable SSL for Message Transfer Protocol	See “Configuring Messaging Security with SSL Encryption” on page 15. See also /certpath, /certfile, /keyfile, and /keypassword.

After you install the Messaging Agent software, you can further configure the Messaging Agent by using a startup file. See “Using Messaging Agent Startup Switches” on page 23 to survey additional ways the Messaging Agent can be configured.

Configuring Messaging Security with SSL Encryption

Secure Sockets Layer (SSL) ensures secure communication between programs by encrypting the complete communication flow between the programs. The Installation program required configuring the messaging agent for SSL encryption, as described in “Installing and Setting Up Your GroupWise Messenger System” in the *GroupWise Messenger 18 Installation Guide*.

When you set up SSL encryption during installation, the Installation program copied the certificate file and key file you specified to the `/opt/novell/messenger/certs` directory to ensure availability for the Messenger agents.

If you want to import a new certificate or switch from internal to external certificates, you must complete the following tasks:

- “Generating a Certificate Signing Request and Private Key” on page 15
- “Submitting the Certificate Signing Request to a Certificate Authority” on page 15
- “Installing the Certificate on the Server” on page 16
- “Modifying the Server Object SSL Certificate” on page 16
- “Modifying the SSL Cipher Suite” on page 16

Generating a Certificate Signing Request and Private Key

Before the Messaging Agent can use external SSL encryption, you must create a certificate by generating a certificate signing request (CSR) and having it issued by a certificate authority (CA). This can be issued either by a public CA or a local CA, such as Novell Certificate Server. (Novell Certificate Server, which runs on a server with NetIQ eDirectory, enables you to establish your own Certificate Authority and issue server certificates for yourself. For more information, see the Novell Certificate Server documentation (https://www.netiq.com/documentation/crt33/) site.). The CSR includes the hostname of the server where the Messaging Agent runs. The Messaging Agent and the Archive Agent can use the same certificate if they run on the same server. The CSR also includes your choice of name and password for the private key file that must be used with each certificate. This information is needed when configuring the Messaging Agent to use SSL encryption.

Submitting the Certificate Signing Request to a Certificate Authority

To receive a server certificate, you need to submit the certificate signing request (*server_name*.csr file) to a certificate authority. If you have not previously used a certificate authority, you can use the keywords “Certificate Authority” to search the web for certificate authority companies. You can also issue your own certificates with a local CA, such as Novell Certificate Server. (Novell Certificate Server, which runs on a server with NetIQ eDirectory, enables you to establish your own Certificate Authority and issue server certificates for yourself. For more information, see the Novell Certificate Server documentation (https://www.netiq.com/documentation/crt33/) site.)

The certificate authority must be able to provide the certificate in Base64/PEM or PFX format.

IMPORTANT: You cannot use an eDirectory root certificate (`rootcert.der` file) as a public certificate.

The process of submitting the CSR varies from company to company. Most provide online submission of the request. Follow their instructions for submitting the request.

Installing the Certificate on the Server

After processing your CSR, the certificate authority returns to you a certificate (*server_name*.crt) file and a private key (*server_name*.key) file. Copy the files to the certs subdirectory of the Messenger agent installation directory.

Modifying the Server Object SSL Certificate

After you have a certificate and a private key file available on the server where the Messaging Agent runs, you are ready to configure the Messaging Agent to use SSL encryption.

- ❒ In the GroupWise Admin console > **Messenger > MessengerService > Servers**, select the server.
- ❒ On the **SSL Settings** tab, fill in the following fields:

  Certificate Path: Certificates are placed by default in \novell\nm\certs for Windows, and /opt/novell/messenger/certs for Linux.

  IMPORTANT: The certificate path must be located on the same server where the Messenger agents are installed. If your SSL certificate and key file are located on a different server, you must copy them into the directory specified in the **Certificate Path** field so that they are always accessible to the Messenger agents.

  SSL Certificate: Browse to and select the certificate file. Or, if it is located in the directory specified in the **Certificate Path** field, you can simply type the file name.

  SSL Key File: Browse to and select your private key file. Or, if it is located in the directory specified in the **Certificate Path** field, you can simply type the file name.

  Set Password: Provide the key file password you established when you submitted the certificate signing request.

  Because you provided the SSL information on the Messenger Server object, it applies to both the Messaging Agent and the Archive Agent if both agents are running on the same server. The same information can be provided on the Security page of each Messenger agent if necessary.
- ❒ Click **Save**.
- ❒ Restart the Messaging Agent to start using SSL encryption.

Corresponding Startup Switches: You can also use the /certpath, /certfile, /keyfile, and /keypassword startup switches in the Messaging Agent startup file to modify the Messaging Agent SSL certificates.

Modifying the SSL Cipher Suite

You can modify the SSL cipher suite if you need to disable certain ciphers that do not work in your environment. The ciphers suite can be modified both on the Archive Agent and the Messaging agent.

IMPORTANT: Unless you are required to modify the cipher suite for your environment, consider carefully before you make any changes as this decreases the security of your Messenger system.

The cipher list must be in OpenSSL format. For more information on OpenSSL format, see Cipher List Format (https://www.openssl.org/docs/man1.0.2/apps/ciphers.html).

To modify the SSL cipher suite use the /sslciphersuite startup switch.

Monitoring the Messaging Agent

By monitoring the Messaging Agent, you can determine whether its current configuration is meeting the needs of your Messenger users. You have a variety of tools to help you monitor the operation of the Messaging Agent:

- "Using the Messaging Agent Web Console" on page 17
- "Using Messaging Agent Log Files" on page 19
- "Using GroupWise Monitor" on page 20
- "Using SNMP Monitoring Programs" on page 20

Using the Messaging Agent Web Console

The Messaging Agent Web Console enables you to monitor and control the Messaging Agent from any location where you have access to a browser and the Internet. This provides substantially more flexible access than the Messaging Agent console, which can only be accessed from the server where the Messaging Agent is running.

- "Setting Up the Messaging Agent Web Console" on page 17
- "Accessing the Messaging Agent Web Console from Your Web Browser" on page 18
- "Monitoring the Messaging Agent at the Web Console" on page 18
- "Accessing the Messaging Agent Web Console from GroupWise Monitor" on page 19

Setting Up the Messaging Agent Web Console

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Messaging Agents >** select the Messaging Agent **> Agent Settings**.
- ❒ Fill in the following fields in the **HTTP** section:

  HTTP User Name: If you want to restrict access to the Messaging Agent Web Console, specify a user name for the Messaging Agent to prompt for before allowing access to the Web Console.

  HTTP Password/Confirm Password: Specify the password for the Messaging Agent to prompt for before allowing access to the Web Console.

  Port: Specify the port number for the Messaging Agent to listen on for service requests from your browser; for example, 8313.

  SSL Select this option if you want the Messaging Agent to use SSL encryption when communicating with your browser.

  In order to use SSL encryption for the Web Console, you must properly configure the Messaging Agent, as described in "Configuring Messaging Security with SSL Encryption" on page 15.
- ❒ Click **Save**.
- ❒ Restart the Messaging Agent to put the HTTP settings into effect.

Corresponding Startup Switches: You can also use the /httpport, /httpuser, /httppassword, and /httpssl startup switches in the Messaging Agent startup file to enable and secure the Messaging Agent Web Console.

Accessing the Messaging Agent Web Console from Your Web Browser

To monitor the Messaging Agent from your browser, view the following URL:

`http://Messenger_server:agent_port`

where *Messenger_server* represents the IP address or hostname of the server where the Messaging Agent is running and *agent_port* represents the port number you specified in "Setting Up the Messaging Agent Web Console" on page 17. For example:

`http://172.16.5.18:8313`

Monitoring the Messaging Agent at the Web Console

The Messaging Agent Web Console provides several pages of information to help you monitor the performance of the Messaging Agent. The bar at the top of the Messaging Agent Web Console displays the name of the agent. Below this bar appears the Web Console menu that lists the pages of information available in the Messaging Agent Web Console.

- "Monitoring Messaging Agent Status" on page 18
- "Checking Monitor Agent Configuration" on page 18
- "Checking the Messaging Agent Operating System Environment" on page 18
- "Viewing and Searching Messaging Agent Log Files" on page 19

Monitoring Messaging Agent Status

When you first access the Messaging Agent Web Console, the Status page is displayed.

Click **Current Users** to display a list of current Messenger users and their IP addresses. Click the User ID, then click **Disconnect User** to disconnect the user.

Click **C/S Handler Threads** to display the Messaging Agent client/server threads, the number of requests each thread has handled, and each thread's current activity.

Click **Chat Rooms** to display a list of current chat rooms and their CN names, owners, and number of active participants. Click **Re-initialize Chat List** to re-initialize the chat room process. By re-initializing the chat room process, chat rooms that are added in the GroupWise Admin console are added to the list of chat rooms. Users can also use the GroupWise Admin console to access the chat rooms after they have been added.

Checking Monitor Agent Configuration

On the Messaging Agent Web Console menu, click **Configuration** to display Messaging Agent configuration information.

Checking the Messaging Agent Operating System Environment

On the Messaging Agent Web Console menu, click **Environment** to display information about the operating system where the Messaging Agent is running.

Viewing and Searching Messaging Agent Log Files

On the Messaging Agent Web console menu, click **Log Files** to display and search Messaging Agent log files.

To view a particular log file, select the log file, then click **View Events**.

To search all log files for a particular string, type the string in the **Events Containing** field, select **Select All**, then click **View Events**. You can also manually select multiple log files to search. The results of the search are displayed on a separate page, which can be printed.

To start a new log file, click **Cycle Log**.

To view your log settings for the current Messaging Agent session, click **Event Log Settings** to display the Configuration page. To change your log settings for the current Message Agent session, click **Event Log** on the Configuration page.

Accessing the Messaging Agent Web Console from GroupWise Monitor

If you use GroupWise Monitor to monitor your GroupWise agents, you can add the Messaging Agent to the list of monitored agents. Continue with "Using GroupWise Monitor" on page 20.

Using Messaging Agent Log Files

Error messages and other information about Messaging Agent functioning are written to log files as well as displaying on the Messaging Agent console. Log files can provide a wealth of information for resolving problems with Messaging Agent functioning.

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Messaging Agents >** select the Messaging Agent **> Agent Settings**.
- ❒ Fill in the following fields:

  Log Level: Controls the amount of information logged by the Messaging Agent. Logged information is displayed in the log message box and written to the Messaging Agent log file during the current agent session. The default is Normal, which displays only the essential information suitable for a smoothly running Messaging Agent. Use Verbose to display the essential information, plus additional information helpful for troubleshooting. Use Diagnostic where very detailed, code-specific information is required.

  Enable disk logging: Select this option so that the information displayed in the message log box at the Messaging Agent console is also saved to disk in log files.

  Log Files Path: Specify the directory where the Messaging Agent stores its log files. The default location is `/var/opt/novell/log/messenger/ma`.

  Typically, you find multiple log files in the specified directory. The first four characters represent the date. The next three identify the agent. A three-digit extension allows for multiple log files created on the same day. For example, a log file named `0518nma.001` indicates that it is a Messaging Agent log file, created on May 18. If you restarted the Messaging Agent on the same day, a new log file started, named `0518nma.002`.

  Log Maximum Age: Specify how many days to keep Messaging Agent log files on disk. The default is 14 days.

  Log Maximum Size: Specify the maximum amount of disk space for all Messaging Agent log files. When the specified disk space is consumed, the Messaging Agent deletes existing log files, starting with the oldest. The default is 128 MB.

- ❒ Click **Save**.
- ❒ Restart the Messaging Agent to put the new log settings into effect.

Corresponding Startup Switches: You can also use the /log, /loglevel, /logdays, and /logmax startup switches in the Messaging Agent startup file to configure Messaging Agent log files.

Using GroupWise Monitor

GroupWise Monitor can be configured to monitor the Messaging Agent as well as the GroupWise Agents (Post Office Agent, Message Transfer Agent, Internet Agent, and WebAccess Agent). For background information about GroupWise Monitor, see "Monitor" in the *GroupWise 18 Administration Guide*.

- ❒ Enable the Messaging Agent Web Console, as described in "Setting Up the Messaging Agent Web Console" on page 17.
- ❒ At the Windows Monitor Agent console, click **Configuration** > **Add GroupWise Messenger System**.
- ❒ Fill in the following fields:

  GroupWise Messenger System Object: Browse to and select the MessengerService object.

  User Name: Browse to and select a User object that has sufficient rights to enable the Monitor Agent to access Messenger agent object properties in eDirectory.

  Password: Specify the eDirectory password associated with the selected User object.
- ❒ Provide the same eDirectory access information as you provided during installation:

  Use Direct Access: Select this option if the Messaging Agent uses direct access to eDirectory.

  - **Replica Address:** If the Messaging Agent is installed on a Windows server, provide the IP address of a server where the Messaging Agent can access a replica of eDirectory.
- ❒ Click **OK** to save the information about your Messenger system.

  The Messaging Agent appears in the root agent group, along with the Archive Agent. You might want to create an agent group specifically for the Messenger agents. See "Creating and Managing Agent Groups" in the *GroupWise 18 Administration Guide*.

Using SNMP Monitoring Programs

You can monitor the Messaging Agent from the Management and Monitoring component of any SNMP management and monitoring program. When properly configured, the Messaging Agent sends SNMP traps to network management consoles for display along with other SNMP monitored programs. It also responds to requests for configuration and status information from SNMP management and monitoring programs.

Although the Messaging Agent is SNMP-enabled by default, the server where the Messaging Agent is installed must be properly configured to support SNMP, and the Messaging Agent object in eDirectory must be properly configured as well. To set up SNMP services for your Messenger server, complete the following tasks:

- "Setting Up SNMP Services for the Messaging Agent" on page 21
- "Copying and Compiling the Messaging Agent MIB File" on page 21

Setting Up SNMP Services for the Messaging Agent

Select the instructions for the platform where the Messaging Agent runs:

The Messaging Agent is compatible with NET-SNMP. An older version of SNMP called UCD-SNMP cannot be used with the Messaging Agent. NET-SNMP comes with the versions of Red Hat Linux supported for Messenger 1.0 for Linux, but it does not come with the supported versions of SUSE Linux. If you are using SUSE Linux, you must update to NET-SNMP in order to use SNMP to monitor the Messaging Agent.

- ❒ Ensure you are logged in as root.
- ❒ If NET-SNMP is not already set up on your Linux server, use the following command to configure SNMP:

  `snmpconf -g basic_setup`

  The `snmpconf` command creates the `snmpd.conf` file in one of the following directories, depending on your version of Linux:

  `/usr/share/snmp ~`

  `/usr/local/share/snmp`

  `/.snmp`
- ❒ Locate the `snmpd.conf` file on your Linux server.
- ❒ In a text editor, add the following line to the `snmpd.conf` file:

  `dlmod Nmweb /opt/novell/messenger/lib/libnmsnmp.so.1`
- ❒ Restart the SNMP daemon (snmpd) to put the changes into effect.
- ❒ In a text editor, make the following changes to the `nmsnmp.conf` file in the `/etc/opt/novell/messenger` directory:
  - Set /daemonPort to a unique port number for the Messaging Agent to listen on; for example, 8305.
  - If you have not already configured the Messaging Agent Web Console, as described in "Setting Up the Messaging Agent Web Console" on page 17, assign an HTTP port for the Messaging Agent.
- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Objects >Messaging Agents >** select the Messaging Agent **> General** select **Enable SNMP**.
- ❒ Restart the Messaging Agent.
- ❒ Continue with "Copying and Compiling the Messaging Agent MIB File" on page 21.

Copying and Compiling the Messaging Agent MIB File

An SNMP-enabled Messaging Agent returns information contained in a Management Information Base (MIB). The MIB is an ASCII data structure that defines the information gathered. It also defines the properties that can be monitored and managed on the SNMP-enabled Messaging Agent.

Before you can monitor an SNMP-enabled Messaging Agent, you must compile the `nmma.mib` file by using your SNMP management program. The Messenger MIBs are located in the `/etc/opt/novell/messenger/mibs` directory after installation.

Optimizing Messaging Agent Performance

You can adjust how the Messaging Agent functions to optimize its performance. Before attempting optimization, you should run the Messaging Agent long enough to observe its efficiency and its impact on other network applications running on the same server. See "Monitoring the Messaging Agent" on page 17.

Also, remember that optimizing your network hardware and operating system can make a difference in Messaging Agent performance.

- ❒ In the GroupWise Admin Console **> Messenger > MessengerService > Objects >Messaging Agents >** select the Messaging Agent **> Agent Settings**.
- ❒ Use the settings in the **Performance Preferences** to specify how the Messaging Agent communicates with the Messenger users.
- ❒ Save your settings, and then stop and start the Messaging Agent to put the settings into effect.

Corresponding Startup Switches: You can also use the /maxconn and /threads startup switches in the Messaging Agent startup file to configure Messaging Agent performance.

Managing the Messaging Server

As your Messenger system grows and evolves, you might need to reconfigure the server where the Messaging Agent runs or move Messaging Agent directories to different locations.

- "Binding the Messaging Agent to a Specific IP Address" on page 22
- "Changing the Messaging Server's Network Address" on page 22
- "Moving the Messaging Agent Working Directory" on page 23

Binding the Messaging Agent to a Specific IP Address

On a server with multiple IP addresses, the Messaging Agent binds to all available IP addresses, and Messenger clients can communicate with the Messaging Agent on all available IP addresses unless you bind them to a specific address.

- ❒ Stop the Messaging Agent on the server.
- ❒ In the GroupWise Admin Console **> Messenger > MessengerService > Objects >Messaging Agents >** select the Messaging Agent **> Agent Settings**.
- ❒ Make sure the IP address you want to use is set in the **TCP/IP Address** field and select **Bind exclusively to TCP/IP Address** in the **Network Address** section.
- ❒ Save your settings, and then start the Messaging Agent to put the settings into effect.

Changing the Messaging Server's Network Address

If you change the IP address or DNS hostname of the server where the Messaging Agent is running, you must also update the server information for your Messenger system.

- ❒ Stop the Messaging Agent on the server.
- ❒ Reconfigure the server with the new IP address.

- ❒ In the GroupWise Admin Console **> Messenger > MessengerService > Objects >Messaging Agents >** select the Messaging Agent **> Agent Settings**.
- ❒ Specify the new IP address in the **TCP/IP Address** field.
- ❒ Save your settings, and then start the Messaging Agent to put the settings into effect.

Moving the Messaging Agent Working Directory

The Messaging Agent uses its working directory for saving various temporary files during message processing. By default, the Messaging Agent and the Archive Agent use the same working directory if they are running on the same server, as specified on the **General** tab of the Messenger Server object. The location specified for the Messaging Agent object overrides the location specified for the Messenger Server object. To change the working directory:

- ❒ Stop the Messaging Agent on the server.
- ❒ Copy the Messaging Agent working directory to the new location. The default working directory is `/var/opt/novell/messenger/temp`.
- ❒ In the GroupWise Admin Console **> Messenger > MessengerService > Objects >Messaging Agents >** select the Messaging Agent **> General**.
- ❒ In the Work Path field, specify the new working directory.
- ❒ Save your settings, and then start the Messaging Agent to put the settings into effect.

Using Messaging Agent Startup Switches

You can override settings provided in the GroupWise Admin console by using startup switches in the Messaging Agent startup file (`strtup.ma`). The startup file is located in `/etc/opt/novell/messenger`. You can override startup switches provided in the startup file by using startup switches on the command line. For more information about starting the Messaging Agent, see "Starting the Messaging Agent" on page 13.

This section contains information on the following startup switches:

- "/certfile" on page 25
- "/certpath" on page 26
- "/dhparm" on page 26
- "/httppassword" on page 26
- "/httpport" on page 26
- "/httpssl" on page 27
- "/httpuser" on page 27
- "/ip" on page 27
- "/keepalive" on page 27
- "/keyfile" on page 28
- "/keypassword" on page 28
- "/language (Windows only)" on page 28
- "/log" on page 29
- "/logdays" on page 29

- "/logdiskoff" on page 29
- "/loglevel" on page 30
- "/logmax" on page 30
- "/maxconns" on page 30
- "/mtpconnecttimeout" on page 30
- "/mtpdatatimeout" on page 31
- "/mtpipaddr" on page 31
- "/mtpport" on page 31
- "/mtpssl" on page 32
- "/nomtp" on page 32
- "/nosnmp" on page 32
- "/password" on page 32
- "/port" on page 32
- "/productinfo" on page 33
- "/queue" on page 33
- "/sslciphersuite" on page 33
- "/ssloption" on page 34
- "/threads" on page 34
- "/user" on page 34

The following table summarizes the Messaging Agent startup switches and how they correspond to configuration settings in the GroupWise Admin console.

***Table 2-2** Messaging Agent Startup Switches*

Messaging Agent	GW Admin Console Setting
--certfile	SSL Certificate
--certpath	Certificate Path
--dhparm	N/A
--httppassword	HTTP Password
--httpport	HTTP Port
--httpuser	HTTP Username
--httpssl	Enable SSL for Web Console
--ip	Host IP Address with Bind to this Address selected
--keepalive	N/A
--keyfile	SSL Key File
--keypassword	SSL Set Password
--log	Log Files Path
--logdays	Log Maximum Age

Messaging Agent	GW Admin Console Setting
--logdiskoff	Enable Disk Logging
--loglevel	Log Level
--logmax	Log Maximum Size
--maxconns	Maximum Number of Users
--mtpconnecttimeout	N/A
--mtpdatatimeout	N/A
--mtpipaddr	Host Address (Archive Agent)
--mtpport	Message Transfer Port (Archive Agent)
--mtpssl	Enable SSL for Message Transfer Protocol (Archive Agent)
--nomtp	N/A
--nosnmp	Enable SNMP
--password	Set Password
--port	Client/Server Port
--productinfo	N/A
--queue	Messaging Queue Path
--sslciphersuite	N/A
--ssloption	N/A
--threads	Client/Server Threads
--user	Username

/certfile

Specifies the full path to the certificate files used to provide secure SSL communication between the Messaging Agent and other programs. See "Configuring Messaging Security with SSL Encryption" on page 15.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--certfile=/*dir*/*file*	/certfile-[*drive*:]*dir**file* /certfile-*svr**sharename**dir**file*
Example:	--certfile=/certs/gw.crt	/certfile-\novell\nm\ma\certs\nm.crt /certfile-m:\novell\nm\ma\certs\nm.crt /certfile-\\s2\c\novell\nm\ma\certs\nm.crt

See also /certpath, /keyfile, and /keypassword.

/certpath

Specifies the full path to the directory where certificate files are stored on your system. See "Configuring Messaging Security with SSL Encryption" on page 15.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--certpath=/*dir*	/certpath-[*drive*:]*dir* /certpath-*svr**sharename**dir*
Example:	--certpath=/certs	/certpath-\novell\nm\ma\certs /certpath-m:\novell\nm\ma\certs /certpath-\\\\svr2\c\novell\nm\ma\certs

See also /certfile, /keyfile, and /keypassword.

/dhparm

Specifies a Diffie-Hellman cipher parameters file used for SSL/TLS to replace the default parameters set by Messenger. Messenger uses default Diffie-Hellman parameters of 2048 bits to generate the DH key. A valid DH parameter is in PEM format.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--dhparm *directory/pemfile*	/dhparm *directory/pemfile*
Example:	--dhparm /var/tmp/dh.pem	/dhparm C:\temp\dh.pem

/httppassword

Specifies the password for the Messaging Agent to prompt for before allowing Messaging Agent status information to be displayed in your browser. Unless you are using SSL encryption, do not use an existing LDAP password because the information passes over the connection between your browser and the Messaging Agent. See "Using the Messaging Agent Web Console" on page 17.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--httppassword= *unique_password*	/httppassword-*unique_password*
Example:	--httppassword=AgentWatch	/httppassword-AgentWatch

See also /httpuser.

/httpport

Sets the HTTP port number used for the Messaging Agent to communicate with your browser. The setting must be unique on the server where the Messaging Agent runs. See "Using the Messaging Agent Web Console" on page 17.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--httpport=*port_number*	/httpport-*port_number*
Example:	--httpport=8315	/httpport-8316

/httpssl

Sets the availability of SSL encryption between the Messaging Agent and the Web Console displayed in your browser. Valid values are enable and disable. See "Using the Messaging Agent Web Console" on page 17.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--httpssl=*setting*	/httpssl-*setting*
Example:	--httpssl=enable	/httpssl-enable

/httpuser

Specifies the user name for the Messaging Agent to prompt for before allowing Messaging Agent status information to be displayed in a browser. Providing a user name is optional. Unless you are using SSL encryption, do not use an existing LDAP user name because the information passes over the connection between your browser and the Messaging Agent. See "Using the Messaging Agent Web Console" on page 17.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--httpuser=*unique_username*	/httpuser-*unique_username*
Example:	--httpuser=NMWebConsole	/httpuser-NMWebConsole

See also /httppassword.

/ip

Binds the Messaging Agent to a specific IP address when the server where it runs uses multiple IP addresses, such as in a clustering environment. Without the /ip switch, the Messaging Agent binds to all available IP addresses and Messenger clients can communicate with the Messaging Agent on all available IP addresses.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--ip=*IP_address*	/ip-*IP_address*
Example:	--ip=172.16.5.19	/ip-172.16.5.20

/keepalive

Adjusts the default ping interval at which the Messenger clients notify the Messaging Agent that they are still active. The default interval is every 10 minutes. This regular communication between the Messaging Agent and the client prevents firewalls and routers from disconnecting connections that seem to be inactive. You can decrease the interval if client users are being unexpectedly disconnected. You can increase the interval to decrease network traffic. Use a setting of 0 (zero) to turn off the ping activity.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--keepalive=*minutes*	/keepalive-*minutes*
Example:	--keepalive=5	/keepalive-15

The ping interval can be adjusted for individual clients by using the /keepalive startup switch with the Messenger client.

/keyfile

Specifies the full path to the private file used to provide SSL encryption between the Messaging Agent and other programs. See "Configuring Messaging Security with SSL Encryption" on page 15.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--keyfile=/*dir*/*file*	/keyfile-[*drive*:]*dir**file* /keyfile-*svr**sharename**dir**file*
Example:	---keyfile=/certs/gw.key	/keyfile-\novell\nm\ma\certs\nm.key /keyfile-m:\novell\nm\ma\certs\nm.key /keyfile-\\\\svr2\c\novell\nm\ma\certs\nm.key

See also /keypassword.

/keypassword

Specifies the password used to encrypt the private SSL key file when it was created. See "Configuring Messaging Security with SSL Encryption" on page 15.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--keypassword=*password*	/keypassword-*password*
Example:	--keypassword=gwssl	/keypassword-gwssl

See also /keyfile.

/language (Windows only)

Specifies the language to run the Messaging Agent in, using a two-letter language code as listed below. When you install the Messenger agents, all language versions are automatically installed.

The initial default is the language used by the operating system. If that language is not available, the Messaging Agent runs in English. Use this switch only if you need to override these defaults.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	N/A	/language-*code*
Example:	N/A	/language-fr

The table below lists the valid language codes:

Language	Language Code
English	EN
French	FR
German	DE
Portuguese	PT
Spanish	ES

/log

Specifies the directory where the Messaging Agent will store its log files. The default location is the `\novell\nm\ma\log` directory. See "Using Messaging Agent Log Files" on page 19.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--log=/*dir*	/log-[*drive*:]*dir* /log-*svr**sharename**dir*
Example:	--log=/nm/log/ma	/log-\nmlog\ma /log-m:\nmlog\ma /log-\\server2\c\mail\nmlog\ma

See also /loglevel, /logdays, /logmax, and /logdiskoff.

/logdays

Specifies how many days to keep Messaging Agent log files on disk. The default is 14 days. See "Using Messaging Agent Log Files" on page 19.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--logdays=*days*	/logdays-*days*
Example:	--logdays=30	/logdays-90

See also /log, /loglevel, /logmax, and /logdiskoff.

/logdiskoff

Turns off disk logging for the Messaging Agent so no information about the functioning of the Messaging Agent is stored on disk. The default is for logging to be turned on. See "Using Messaging Agent Log Files" on page 19.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--logdiskoff	/logdiskoff

See also /log, /loglevel, /logdays, and /logmax.

/loglevel

Controls the amount of information logged by the Messaging Agent. Logged information is displayed in the log message box and written to the Messaging Agent log file during the current agent session. The default is Normal, which displays only the essential information suitable for a smoothly running Messaging Agent. Use Verbose to display the essential information, plus additional information helpful for troubleshooting. Use Diagnostic to include very detailed, code-specific information. See "Using Messaging Agent Log Files" on page 19.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--loglevel=*level*	/loglevel-*level*
Example:	--loglevel=diagnostic	/loglevel-diagnostic

See also /log, /logdays, /logmax, and /logdiskoff.

/logmax

Sets the maximum amount of disk space for all Messaging Agent log files. When the specified disk space is consumed, the Messaging Agent deletes existing log files, starting with the oldest. The default is 128 MB. See "Using Messaging Agent Log Files" on page 19.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--logmax=*megabytes*	/logmax-*megabytes*
Example:	--logmax=256	/logmax-256

See also /log, /loglevel, /logdays, and /logdiskoff.

/maxconns

Specifies the maximum number of connections between the Messaging Agent and Messenger clients. The default is 5120. See "Optimizing Messaging Agent Performance" on page 22.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--maxconns=*connections*	/maxconns-*connections*
Example:	--maxconns=10000	/maxconns-10000

See also /threads.

/mtpconnecttimeout

Specifies the number of seconds that the Messaging Agent waits for a response from the Archive Agent before returning an error. The default is 5 seconds. See "Optimizing the Connection between the Archive Agent and the Messaging Agent" on page 71.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--mtpconnecttimeout= *seconds*	/mtpconnecttimeout-*seconds*
Example:	--mtpconnecttimeout=60	/mtpconnecttimeout-60

See also /mtpdatatimeout.

/mtpdatatimeout

Specify in seconds the amount of time the Messaging Agent tries to send conversations to the Archive agent before reporting an error. The default is 20 seconds. See “Optimizing the Connection between the Archive Agent and the Messaging Agent” on page 71.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--mtpdatatimeout=*seconds*	/mtpdatatimeout-*seconds*
Example:	--mtpconnecttimeout=40	/mtpconnecttimeout-60

See also /mtpdatatimeout.

/mtpipaddr

Specifies the network address of the Server where the Archive Agent runs, as either an IP address or a DNS hostname.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--mtpipaddr= *network_address*	/mtpipaddr-*network_address*
Example:	--mtpipaddr=172.16.5.19 --mtpipaddr=server3	/mtpipaddr-172.16.5.20 /mtpipaddr-server4

See also /mtpport.

/mtpport

Specifies the message transfer port number the Archive Agent listens on for conversations to archive. By default, the Messaging Agent uses 8312.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--mtpport=*port_number*	/mtpport-*port_number*
Example:	--mtpport=8413	/mtpport-8414

See also /mtpipaddr.

/mtpssl

Sets the availability of SSL encryption between the Archive Agent and the Messaging Agent. Valid values are enable and disable. See "Enhancing Archive Security with SSL Encryption" on page 67.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--mtpssl=*setting*	/mtpssl-*setting*
Example:	--mtpssl=enable	/mtpssl-enable

/nomtp

Disables the Messaging Agent's attempts to contact the Archive Agent. You might want to do this if you do not plan to enable archiving.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--nomtp	/nomtp

/nosnmp

Disables SNMP for the Messaging Agent. The default is to have SNMP enabled. See "Using SNMP Monitoring Programs" on page 20.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--nosnmp	/nosnmp

/password

Provides the password for the Messaging Agent to use when accessing eDirectory in order to obtain its configuration information from the Messaging Agent object. This switch is required in order to start the Messaging Agent. See "Starting the Messaging Agent" on page 13. By default, the password is obfuscated for security purposes. If the password has been obfuscated, the password is prepended with $$: in the startup file.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--password=*eDir_password*	/password-*eDir_password*
Example:	--password=NMAgent	/password-NMAgent

See also /user.

/port

Sets the port number on which the Messaging Agent listens for service requests from Messenger clients. The default is 8300. See "Configuring the Messaging Agent" on page 13.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--port=*port_number*	/port-*port_number*
Example:	--port=8302	/port-8303

/productinfo

Sets the level of anonymous product information is sent to Micro Focus. The level is initially set during the install or upgrade. The following options are available:

- **0:** Turns off anonymous product information collection.
- **1:** Enables basic collection which collects the uptime, product version, OS type, and number of peak users.
- **2:** Enables basic collection additional data collection which adds message traffic, chat room usage, number of conversations, and other similar information.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--productinfo=*value*	/productinfo-*value*
Example:	--productinfo=1	/productinfo-1

/queue

Specifies the directory where the Messaging Agent stores conversations to archive if it is unable to communicate with the Archive Agent. The default is \novell\nm\ma\queue. See "Moving the Messaging Agent Conversation Holding Queue" on page 73.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--queue=/*dir*	/queue-[*drive*:]*dir* /queue-*svr**sharename**dir*\\
Example:	--queue=/nmqueues/ma	/queue-\nmqueues\ma /queue-m:\nmqueues\ma /queue-\\\\server2\c\mail\nmqueues\ma

/sslciphersuite

Sets the SSL cipher suites used by the Archive Agent, the Messaging Agent, and Messenger clients. The cipher list must be in OpenSSL format. For more information on OpenSSL format, see Cipher List Format (https://www.openssl.org/docs/apps/ciphers.html#CIPHER-LIST-FORMAT)

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--sslciphersuite *"setting"*	/sslciphersuite-*"setting*"
Example:	--sslciphersuite "HIGH:!AECDH:!EXP:@STRENGTH"	/sslciphersuite-"HIGH:!AECDH:!EXP:@STRENGTH"

/ssloption

Specify a specific SSL protocol to disable. By specifying SSL_OP_NO_TLSv1, Messenger will disable TLSv1 support. Specify additional options by adding the SSL key work separated by a comma.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--ssloption *SSL_protocol*	/ssloption *SSL_protocol*
Example:	--ssloption SSL_OP_NO_TLSv1,SSL_OP_NO_TLSv1_1	/ssloption SSL_OP_NO_TLSv1,SSL_OP_NO_TLSv1_1

/threads

Specifies the maximum number of client/server threads the Messaging Agent can create. The default is 15. See "Optimizing Messaging Agent Performance" on page 22.

	Linux Messaging Agent	WIndows Messaging Agent
Syntax:	--threads=*number*	/threads-*number*
Example:	--threads=20	/threads-30

See also /maxconns.

/user

Provides the eDirectory user name for the Messaging Agent to use when accessing eDirectory to obtain its configuration information from the Messaging Agent object. This switch is required in order to start the Messaging Agent. See "Starting the Messaging Agent" on page 13.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--user=CN=*User_object*, OU=*org_unit*,O=*organization*	/user-CN=*User_object*, OU=*org_unit*,O=*organization*
Example:	--user=CN=Messenger, OU=Users,O=Novell	/user-CN=Messenger, OU=Users,O=Novell

IMPORTANT: Use commas, rather than periods, between object names. If any object name includes a space, surround the switch value with double quotation marks.

See also /password.

3 Managing Messenger Client Users

Although users can begin to use the GroupWise Messenger client immediately after you have set up your Messenger system, as described in the *GroupWise Messenger 18 Installation Guide*, you might want to do some additional system setup, as described in the following sections:

- "Adding Users to Your Messenger System" on page 35
- "Providing User Searches Based on Email Addresses" on page 36
- "Setting User Policies" on page 37
- "Distributing the Messenger Client Software" on page 45
- "Configuring the Messenger Client Software" on page 48

These sections focus on the Messaging Agent, although some of the tasks apply to the Archive Agent as well.

Adding Users to Your Messenger System

After installing Messenger, you need to add users to your system. They can be either GroupWise users or just Messenger users. If you upgraded from Messenger 3.x to Messenger 18, your Messenger users were migrated from eDirectory. You can link these users to their GroupWise user profile by associating them.

NOTE: If you have configured a GroupWise MTA with LDAP and have enabled **Automatically create and delete accounts for GroupWise users** in the GroupWise Admin console > **Messenger** > **MessengerService** > **Settings** > **Account Management**, new users that are added to GroupWise will automatically be added to Messenger as well. For more information on enabling LDAP on an MTA, see Configuring the LDAP Server Capabilities in the *GroupWise 18 Administration Guide*.

- "Adding GroupWise Users" on page 35
- "Adding Messenger Only Users" on page 36
- "Associating Users" on page 36

Adding GroupWise Users

When adding GroupWise users to Messenger, you need to manually enable the users in Messenger:

- ❒ In the GroupWise Admin Console **> Users**, select the users you want to add to Messenger.
- ❒ Select **Messenger > Enable**.

  Users are imported into Messenger. Any issues with the import are displayed.

Adding Messenger Only Users

You can add Messenger users that are not in GroupWise:

- ❒ In the GroupWise Admin Console **> Messenger > MessengerService > User**, click **New**.
- ❒ Enter in the information for the new user.

Associating Users

When you migrate from Messenger 3.x to Messenger 18, your Messenger users are migrated from eDirectory and are stored in the Messenger database. You can associate these users with your GroupWise users to manage both the GroupWise settings and Messenger user settings in one location. To associate users:

- ❒ In the GroupWise Admin Console **> Users >** *select a user* **> Messenger > Associate.**
- ❒ Select the users in Messenger that corresponds to the GroupWise user.

  You can now manage the user's Messenger preferences using the Messenger tab for the user.

Providing User Searches Based on Email Addresses

By default, Messenger users can search for other users to add to their contact lists in the Messenger client by first name, by last name, by first and last name, and by LDAP user ID. You can add the capability of searching on email addresses by setting up Messenger addresses that are equivalent to users' existing email addresses. To set up Messenger addresses, you must add one or more hostnames to your Messenger system.

- "Establishing a Hostname for Your Messenger System" on page 36

Establishing a Hostname for Your Messenger System

If all of your Messenger users have email addresses that are part of the same Internet domain (for example, Corporate.com), you can set up your Messenger system to recognize that Internet domain name as a Messenger address. This enables users to locate contacts by searching for their email addresses (for example, JSmith@Corporate.com).

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Hosts**, select **New**.
- ❒ Specify a descriptive name for the new Host.

  For simplicity, you might want to name the new host profile after the Internet domain name it represents. For example, if users receive email at *username*@Corporate.com, then you could use Corporate as the name of the host profile.
- ❒ In the **Host Name** field, specify the Internet domain name that appears in users' email addresses (for example, Corporate.com).
- ❒ Click **Ok** to save the Host. Select the Host and select **Enabled**, then save.
- ❒ Go to Messenger **Settings** tab **> Host Settings**.
- ❒ Add the new host that you created previously.
- ❒ Click **Save**.
- ❒ Restart the Messaging Agent to put the new hostname into effect.

Messenger users can now specify email addresses as well as user IDs in the Messenger client **Use This User ID** field.

If archiving is enabled, authorized Messenger users can search the Messenger archive for users' conversations by specifying their email addresses. Conversations archived before the hostname was established are not searchable by email address.

NOTE: If your organization is large, it might be divided into units. For example, Corporate.com might include Development.Corporate.com, Sales.Corporate.com, and so forth. By setting up multiple hostnames, you enable Messenger users to search for contacts within subsets of your organization.

Setting User Policies

As an administrator, you can set user policies to control how some Messenger client features work and to establish defaults for some Messenger client functionality. You can configure user policies to apply to all Messenger users or to selected Messenger users.

- "Editing the Default User Policy" on page 38
- "Creating a User Policy" on page 38
- "Customizing Messenger Client Features" on page 39
- "Customizing Personal History Features" on page 40
- "Controlling Users' Contact Lists" on page 41
- "Setting Up a Default Privacy List" on page 42
- "Selecting Default Display Attributes" on page 43
- "Creating A Custom Status" on page 44
- "Applying a Policy to Specific Users" on page 45

Editing the Default User Policy

If you use the same policy for all Messenger users, editing the default user policy affects all users. If you have multiple user policies, editing the default user policy affects those users who are not governed by another policy.

- ❐ In the GroupWise Admin console > **Messenger > MessengerService > Policy > DefaultPolicy**, customize the policy as desired:

Policy Property Page	Policy Options
General	**Enable GroupWise Messenger services**, **Archive message sessions**, **Allow users to search eDirectory for other users**, **Allow users to send broadcast messages to other users**, **Allow users to send system broadcast messages**, **Allow users to use chat rooms**, **Allow users to create chat rooms**, **Allow users to change their password**, **Allow users to use Remember Password**, **Enable users to connect multiple clients simultaneously**, **Allow users to use Messenger mobile apps**, **Default host**, **Scope profile**
Personal History	**Allow users to print and save conversations**, **Allow users to use Personal History**
Contact List	**Maximum number of contacts**, **Maximum number of folders**, **Contact List**
Privacy	**Allowed**/**Blocked**
Information List	**Selected Attributes**
Custom Status	**Custom Status List**
Used By	**Reference List**

- ❐ Click **Save**.
- ❐ After you modify the Default Policy object, restart the Messenger agents to put the new default policy into effect throughout your Messenger system.

Creating a User Policy

If you want to provide different policies for different users, you need to create multiple Policy objects.

- ❐ In the GroupWise Admin console > **Messenger > MessengerService > Policy**, select **New**.
- ❐ Specify a descriptive name for the new policy.

- ❒ Select the new policy to edit it and customize it as needed:

Policy Property Page	Policy Options
General	**Enable GroupWise Messenger services**, **Archive message sessions**, **Allow users to search eDirectory for other users**, **Allow users to send broadcast messages to other users**, **Allow users to send system broadcast messages**, **Allow users to use chat rooms**, **Allow users to create chat rooms**, **Allow users to change their password**, **Allow users to use Remember Password**, **Enable users to connect multiple clients simultaneously**, Allow users to use Messenger mobile apps, **Default host**, **Scope profile**
Personal History	**Allow users to print and save conversations**, **Allow users to use Personal History**
Contact List	**Maximum number of contacts**, **Maximum number of folders**, **Contact List**
Privacy	**Allowed**/**Blocked**
Information List	**Selected Attributes**
Custom Status	**Custom Status List**
Used By	**Reference List**

- ❒ Click **Save**.

  After you create a new policy, you do not need to restart the Messenger agents in order for the updated policy to be in effect. The new policy is in effect the next time users governed by the policy log in to Messenger, as described in "Applying a Policy to Specific Users" on page 45.

Customizing Messenger Client Features

The options on the General page of the Policy object customize how the Messenger client works for users governed by the policy you are creating or editing. You can set these options to enable or disable certain functionality and to provide some settings that override comparable settings on the Messenger Service object.

- ❒ Edit or create a user policy.
- ❒ Click **Policy** > **General**.
- ❒ Fill in the following fields:

  Enable GroupWise Messenger services: Use this option to enable or disable the Messenger client for the users governed by this policy. It is enabled by default.

  Archive message sessions: Use this option to enable or disable conversation archiving for users governed by this policy. It is disabled by default. If you want to enable archiving, see Chapter 5, "Enabling and Managing Archiving," on page 65.

  Allow users to search for other users: Use this option to allow or prevent Messenger users from building their contact lists by searching for users. It is enabled by default. If you disable this option, users governed by this policy can only add known user IDs to their contact lists.

  Allow users to send broadcast messages to other users: Use this option to enable or disable users to send broadcast messages to other users. It is enabled by default. If you disable this option, users governed by this policy cannot send broadcast messages to other users.

Allow users to send system broadcast messages: Use this option to enable or disable users to send system broadcast messages to all users who are online. It is disabled by default. If you enable this feature, users governed by this policy can send broadcast messages to all online users.

Allow users to use chat rooms: Use this option to enable or disable users to use Messenger chat rooms. It is enabled by default. If you disable this feature, users governed by this policy cannot join Messenger chat rooms.

Allow users to create chat rooms: Use this option to enable or disable users to create Messenger chat rooms. It is disabled by default. If you enable this option, users governed by this policy can create Messenger chat rooms.

Allow users to change their password: Use this option to enable or disable users to change their eDirectory passwords from the Messenger client. It is disabled by default because Messenger authenticates users by using their eDirectory passwords and you might not want users changing their eDirectory passwords in the Messenger client. If you enable this option, users governed by this policy have a **Change Password** item on the **Tools** menu in the Messenger client where they can change their eDirectory passwords.

Allow users to use remember password: Use this option to enable or disable users to use Remember Password. It is enabled by default. If you disable this option, users governed by this policy cannot use Remember Password in the client.

Enable users to connect multiple clients simultaneously: Use this option to allow users in this policy to connect to multiple Messenger clients simultaneously. If this option is not selected, users are logged out of the first client when they log in to a second client.

Allow users to use Messenger mobile apps: Use this option to allow users in this policy to use the Messenger mobile apps. If this option is not selected, users cannot log in to Messenger from the mobile app.

Default host: If you have set up multiple hosts in your Messenger system, as described in "Providing User Searches Based on Email Addresses" on page 36, browse to and select the host that applies to the users governed by this policy.

- ❒ If you do not want an option to be changeable for individual Messenger users, click the **Lock** button next to it.

  Each option is accompanied by a **Lock** button. When an option is unlocked, it can be overridden by changing the option setting on the GroupWise Messenger General page of individual User objects.

- ❒ Click **Save**.
- ❒ Continue with "Customizing Personal History Features" on page 40.

  or

  If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 45.

Customizing Personal History Features

The options on the History page of the Policy object customize how the Messenger client works for users governed by the policy you are creating or editing. You can set these options to enable or disable certain functionality and to provide some settings that override comparable settings on the Messenger Service object.

- ❒ Edit or create a user policy.
- ❒ Click **Policy** > **Personal History**.

- ❒ Fill in the following fields:

  Allow Users to Print and Save Conversations: Use this option to enable or disable users to print or save their conversations. It is enabled by default. If you disable this feature, users governed by this policy cannot print or save their conversations.

  Allow Users to Use Personal History: Use this option to enable or disable users to use Personal History. It is enabled by default. If you disable this feature, users governed by this policy cannot use Personal History.

- ❒ If you do not want an option to be changeable for individual Messenger users, click the **Lock** button next to it.
- ❒ Click **Save**.
- ❒ Continue with "Controlling Users' Contact Lists" on page 41.

  or

  If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 45.

Controlling Users' Contact Lists

By default, users build their own contact lists in the Messenger client and they can add as many as 100 contacts. As an administrator, you can control the size of the contact list and you can create a default contact list for Messenger users, so that users governed by this policy have something to start with when they first use the Messenger client.

- ❒ Edit or create a user policy.
- ❒ Click **Policy** > **Contact List**.
- ❒ Fill in the following fields to control the size of users' contact lists:

  Maximum Number of Contacts: Specify the maximum number of users that users governed by this policy can add to their contact lists. The default is 100. Users' contact lists are stored on their User objects in your Messenger system. Therefore, you might want to limit the amount of space occupied by contact lists in eDirectory.

  Maximum Number of Folders: Specify the maximum number of folders that users governed by this policy can create in their contact lists. The default is 50.

- ❒ If you want to create a default contact list for the users governed by this policy:
  - ❒ To add users to the default contact list, click **Add User**, browse to and select one or more User objects, then click **OK**.
  - ❒ To add a folder in the default contact list, click **Add Folder**, select the new folder, click **Edit**, specify the name of the folder, then click **OK**.
  - ❒ To add users to a folder, select the folder, click **Add User**, browse to and select one or more User objects, then click **OK**.

    You cannot drag and drop users into a folder.

  - ❒ To expand or collapse the list of users in a folder, double-click the folder.
  - ❒ To change the way a user name displays in the default contact list, select the user, click **Edit**, specify the user name that you want to appear in the contact list, then click **OK**.

    This does not rename the eDirectory User object.

  - ❒ To delete a user or folder from the default contact list, select the user or folder, then click **Remove**.

Folders do not need to be empty to be deleted. You are not prompted for confirmation. There is no undo.

- ❒ If you are creating an extensive default contact list, click **Apply** occasionally to save your work.

  New Messenger users see the default contact list when they first start the Messenger client. Existing Messenger users who already have their own contact lists are not affected by your default contact list.

  Each contact list option is accompanied by a **Lock** button. When an option is unlocked, it can be overridden by changing the option setting on the GroupWise Messenger General page of individual User objects, or in the case of the contact list, by Messenger users themselves.

- ❒ If you do not want an option to be changeable for individual Messenger users, click the **Lock** button next to it.

IMPORTANT: If you lock the contact list, users cannot change their contact lists in the Messenger client.

- ❒ Click **Save**.
- ❒ Continue with "Setting Up a Default Privacy List" on page 42.

  or

  If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 45.

Setting Up a Default Privacy List

By default, all users whose User objects are located in a context listed in a scope profile have access to Messenger. Users control who can see their online status and who can send them messages. As an administrator, you can establish a default privacy list for users governed by the policy you are creating or editing.

- ❒ Edit or create a user policy.
- ❒ Click **Policy** > **Privacy**.
- ❒ To add users to the **Allowed** list, click in the **Allowed** list, then click the + button.

  or

  To add users to the **Blocked** list, click in the **Blocked** list, then click the + button.
- ❒ Browse to and select one or more users.
- ❒ To move users from one list to the other, select one or more users, then click the right-arrow or left-arrow button.
- ❒ To delete users from either list, select one or more users, then click the **Remove** button.

  New Messenger users see the default privacy list when they first start the Messenger client. Existing Messenger users who already have their own privacy lists are not affected by your default privacy list.

  The privacy list option is accompanied by a **Lock** button. When an option is unlocked, it can be overridden by changing the option setting on the GroupWise Messenger General page of individual User objects, or in the case of the privacy list, by Messenger users themselves.
- ❒ If you do not want the default privacy list to be changeable for individual Messenger users, click the **Lock** button.

IMPORTANT: If you lock the privacy list, users cannot change their privacy lists in the Messenger client.

- ❒ Click **Save**.
- ❒ Continue with "Selecting Default Display Attributes" on page 43.

  or

  If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 45.

Selecting Default Display Attributes

When Messenger users display contact property information in their Messenger contact lists, the following information is displayed if it is available in LDAP:

- First Name
- Last Name
- Department
- Title
- Email Address
- Description

You can make more or less LDAP information available for display in the Messenger client to meet the needs of your users.

- ❒ Edit or create a user policy.
- ❒ Click **Policy** > **Information List**.

  The information is listed according to its LDAP attribute name.
- ❒ If the list includes information that you do not want users to be able to see, select an attribute, then click **Remove**.
- ❒ If you want to add more attributes to the list:
  - ❒ Click **Add**.
  - ❒ If you want to add LDAP attributes, click **Available Attributes**.

    All LDAP attributes of type STRING or DN are listed.
  - ❒ Select one or more attributes, then click **OK** twice to return to the Information List page.

    or

    If you want to add LDAP attributes, specify one or more LDAP attributes, separating the attributes with semicolons (;), then click **OK** to return to the Information List page.
  - ❒ If you want to add telephone numbers and fax numbers (which are not attributes of type STRING or DN in eDirectory), specify telephoneNumber and/or faxNumber as attributes, then click **OK** to return to the Information List page.

    The information list option is accompanied by a **Lock** button. When an option is unlocked, it can be overridden by changing the option setting on the GroupWise Messenger General page of individual User objects.
- ❒ If you do not want the default information list to be changeable for individual Messenger users, click the **Lock** button.

- Click **Save**.
- Continue with "Creating A Custom Status" on page 44.

  or

  If you are finished configuring the policy and you are not modifying the Default Policy, skip to "Applying a Policy to Specific Users" on page 45.

Creating A Custom Status

By default, the Messenger client provides the following selectable user statuses that indicate user presence in the Messenger system:

Icon	Status
	Online
	Busy
	Away
	Appear Offline

In the Messenger client, users can create their own custom statuses to indicate their presence. As an administrator, you can create custom statuses to be available to all users governed by this policy.

- Edit or create a user policy.
- Click **Policy** > **Custom Status**.

  Any existing custom status is listed.
- Click **Add** to create a new custom status.
- Fill in the following fields:

  Show As: Select **Online**, **Away**, or **Busy** to determine the icon to accompany the custom status.

  Title: Specify a descriptive name for the new status.

  Auto-Reply Message: (Optional) Specify a message for the Messenger Agent to return automatically whenever the new status is selected in the Messenger client.
- Click **OK** to add the new custom status to the list.
- Repeat the previous steps to create additional custom statuses.

  New Messenger users see your custom statuses when they first start the Messenger client. Existing Messenger users who might have created their own custom statuses are not affected by your custom statuses.

  The custom status list option is accompanied by a **Lock** button. When an option is unlocked, it can be overridden by changing the option setting on the GroupWise Messenger General page of individual User objects, or in the case of the custom status list, by Messenger users themselves.
- If you do not want the custom statuses to be changeable for individual Messenger users, click the **Lock** button.

  IMPORTANT: If you lock the custom status list, users cannot create their own custom statuses in the Messenger client.

❒ Click **Save**, then continue with “Applying a Policy to Specific Users” on page 45.

or

If you are modifying the Default Policy, click **OK** to save it.

Applying a Policy to Specific Users

After you have set the needed policy options, you select the Messenger users to be governed by the policy.

❒ Edit or create a user policy.

❒ Click **Policy** > **Used By**.

Any users currently governed by the policy are listed.

❒ Click **Add**, then browse to and select those users that you want to be governed by this policy.

The reference list option is accompanied by a **Lock** button. When an option is unlocked, it can be overridden by changing the option setting on the GroupWise Messenger General page of individual User objects.

❒ If you do not want the reference list to be changeable for individual Messenger users, click the **Lock** button.

❒ Click **OK** to save the user policy.

You do not need to restart the Messaging Agent in order for the new policy to be in effect. The new policy takes effect for users governed by the policy the next time they log in to Messenger.

Distributing the Messenger Client Software

You have many alternatives for helping users install the Messenger client:

- “Using the GroupWise Messenger Download Page” on page 45
- “Setting Up Auto-Update” on page 46
- “Configuring Your Web Server to Download the Messenger Client” on page 46
- “Using ZENworks Configuration Management to Distribute the Messenger Windows Client” on page 47

Using the GroupWise Messenger Download Page

The GroupWise Messenger download page is available to users as soon as you finish running the Messenger Installation program (as described in the *GroupWise Messenger 18 Installation Guide*) and start the Messaging Agent (as described in “Starting the Messaging Agent” on page 13).

In order for users to access the GroupWise Messenger download page in their browsers, you need to tell them the IP address or DNS hostname of the server where the Messaging Agent is running and the port number (8300 by default). For example, if you installed the Messaging Agent on a server with an IP address of 172.16.5.18, the GroupWise Messenger download page is:

http://172.16.5.18:8300

When users click the GroupWise Messenger link, they download the `nvlmsgr.exe` file from the `\novell\nm\ma\software\client\win32` directory. By following the instructions on the download page, users can install and start the Messenger client quickly and easily.

Setting Up Auto-Update

You can require Messenger users to update their Messenger client software whenever a new version of the client is available.

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Settings > Client Settings**, configure the following information:

  Enable Client Download Through a Browser: Select this option so that users can download the updated Messenger client software from the GroupWise Messenger download page, as described in "Using the GroupWise Messenger Download Page" on page 45.

  Version: Specify the minimum acceptable version number for the Messenger client software.

  Date: Click the **Calendar** button to specify the earliest acceptable date for the Messenger client software.

  If you fill in the **Version** and/or **Date fields**, users cannot run the Messenger client until they update their software, unless you allow grace logins.

  Grace Logins: Specify the number of times users can log in to the Messenger system without updating their Messenger client software.

  If you leave the **Date** and **Version** fields blank, users can choose whether to update their Messenger client software when they are notified that a new version is available.

  Client version information is stored on each user's workstation in the `nmcl32.ver` file.

  Update Message: If desired, type the message that you want Messenger users to see when they are notified about the Messenger client update.

  Client Download URLs: Click **Add** to specify each URL where the user's browser or the Messenger client are redirected when attempting to download the updated client software.

  The URLs in the list you create are tried in the order you list them. Ensure that the Messenger `nvlmsgr.exe` file is available for download from each URL in the list. For more information, see "Configuring Your Web Server to Download the Messenger Client" on page 46.
- ❒ Click **Save**.

When Messenger users start the Messenger client, they are notified whenever updated client software is available.

Configuring Your Web Server to Download the Messenger Client

By default, the Messaging Agent handles downloading Messenger client software to Messenger users. If this activity seems to interfere with its ability to handle its instant messaging functions in a timely manner, you can configure your web server to download the client software instead. Before performing the following steps, you should already have created your Messenger system and have the Messenger agents running. You can download either Messenger client (Windows or Cross-Platform) from a Messenger system on any platform (Linux or Windows).

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Settings > Client Settings**, in the **Client Download URLs** list, click **Add**.
- ❒ Specify the URL of your web server. For example:

`http://nm.novell.com:80`

Be sure to include both the http:// and the port number where your web server listens for service requests.

- ❒ Click **OK** to close the Download URL dialog box, then click **Save**.
- ❒ From the Messenger software subdirectory, copy the `index.htm` file and the `msgricon.gif` file to the primary document directory of your web server.

  On Windows, the Messenger software directory is `\novell\nm\ma\software`.

  On Linux, it is `/opt/novell/messenger/software`.

  If you want to provide the GroupWise Messenger download page in a language other than English, copy the `index.htm` file from the appropriate language subdirectory beneath the Messenger software directory.
- ❒ Edit the `index.htm` file to remove all instances of `~down`. For example:

  Before: `/~down/client/win32/nvlmsgr.exe` `/~down/client/linux/nvlmsgr.bin` `/~down/client/mac/nvlmsgr.sit`

  After: `/client/win32/nvlmsgr.exe` `/client/xplat/linux/nvlmsgr.bin` `/client/xplat/mac/nvlmsgr.sit`
- ❒ Depending on the requirements of your web server, save the file as either `index.htm` or `index.html`.
- ❒ Under the primary document directory of your web server, create a client subdirectory, then create a platform-specific subdirectory in it, to create the following directory structure:

  primary_doc_dir`/client/win32` *primary_doc_dir*`/client/xplat/linux` *primary_doc_dir*`/client/xplat/mac`
- ❒ From the platform-specific subdirectory (`win32`, `linux`, or `mac`) of the Messenger software directory, copy the appropriate Messenger file (`nvlmsgr.exe`, `nvlmsgr.bin`, or `nvlmsgr.sit`) into the corresponding *primary_doc_dir* platform-specific subdirectory.
- ❒ In the platform-specific *primary_doc_dir* subdirectory, create an ASCII text file named `files.txt` with one of the following lines depending on your client platform:

  `client/win32/nvlmsgr.exe` `client/xplat/linux/nvlmsgr.bin` `client/xplat/mac/nvlmsgr.sit`
- ❒ After typing the appropriate platform-specific line, press Enter so that there is an empty line at the end of the file.
- ❒ Save the updated `files.txt` file.
- ❒ Repeat the previous steps for each platform-specific subdirectory you created
- ❒ so that you have three `files.txt` files, one for each platform.
- ❒ Restart the Messenger agents to put the list of client download URLs into effect.

You do not need to restart the web server in order for Messenger users to be able to download the Messenger client software.

Using ZENworks Configuration Management to Distribute the Messenger Windows Client

You can use the Configuration Management functionality in Micro Focus ZENworks 2017 to distribute the GroupWise Messenger Windows client to workstations.

IMPORTANT: This information assumes that you are familiar with ZENworks 2017 Configuration Management. It also assumes that you already have all the workstations where you want to install the Messenger client software defined as devices in ZENworks Configuration Management. For background information, or for help completing the ZENworks tasks outlined in the steps below, see the ZENworks Configuration Management documentation at the Novell ZENworks documentation site (https://www.novell.com/documentation/zenworks2017/).

1. Create a bundle for the Messenger software, as described in "Creating Bundles" in the *ZENworks Software Distribution Reference*.
2. Associate the Messenger bundle with devices on your network, as described in "Assigning Existing Bundles to Devices" in the *ZENworks Software Distribution Reference*.

Configuring the Messenger Client Software

The following sections describe some specialized ways to configure the Messenger client software:

- "Using the Configuration File (setup.cfg) When Installing the Windows Messenger Client" on page 48
- "Using Startup Switches When Starting the Messenger Client" on page 51
- "Using URL Commands in Your Web Browser on Windows" on page 55

Using the Configuration File (setup.cfg) When Installing the Windows Messenger Client

The Messenger configuration file (`setup.cfg`) controls how the Windows Messenger client software is installed by client users. It includes the following sections and parameters:

[NMSetup] Path= ProgramFolder= LaunchNow= ViewReadme= IconOnDesktop= LaunchOnStartup= ServerAddress= ServerPort= ForceAddressAndPort= UseWindowsColors= ShowRememberPassword=

[Languages]

[Show Dialogs] HideAllDialogs= SelectDestination= SelectProgramFolder= LanguageSelect= SetupComplete=

After you change information in the `setup.cfg` file, you must delete the `nvlmsgr.exe` file, then stop and restart the Messaging Agent so that it re-creates the `nvlmsgr.exe` file with the new configuration information. The new configuration information then applies the next time users install or update their client software.

- "[NMSetup]" on page 48
- "[Languages]" on page 50
- "[Show Dialogs]" on page 50

[NMSetup]

The `[NMSetup]` section of the `setup.cfg` file enables you to control the options the Messenger client Installation program presents to the user during installation.

Path=

Specify the path where you want the Installation program to install the client software.

ProgramFolder=

Specify the item on the **Start** > **Programs** menu where you want the Messenger client to appear. For example, you can specify GroupWise Messenger.

LaunchNow=

By default, the **Start GroupWise Messenger Now** check box on the Setup Complete page is selected. Specify `No` if you want it deselected by default when the user installs the client software.

LaunchOnStartup=

By default, the Messenger client starts when Windows starts. Specify `No` if you don't want it to start when Windows starts. Users then need to use the desktop icon to start the Messenger client.

ViewReadme=

By default, the **View the GroupWise Messenger Readme** check box on the Setup Complete page is selected. Specify `No` if you want it deselected by default when the user installs the client software.

IconOnDesktop=

By default, the **Put an Icon on the Desktop** check box on the Setup Complete page is selected. Specify `No` if you want it deselected by default when the user installs the client software.

RegKeyForDefaultPath=

Use this Windows registry key to specify a default installation path.

RegKeyForDefaultFolder=Software\Novell\GroupWise\Setup\PROGRAMFOLDER

Use this Windows registry key to specify the item on the **Start** > **Programs** menu where you want the Messenger client to appear.

ServerAddress=

Defaults to the IP address of the server where the Messaging Agent is installed.

ServerPort=

Defaults to 8300. Specify a different port number if the default port number is already in use on the server.

ForceAddressAndPort=

If you change the server address or port information, specify `No` if you want existing Messenger client installations to continue using the original server address and/or port while new Messenger client installations use the updated server and/or port information. Specify `Yes` for both existing and new installations to use the updated information.

If you do not set `ForceAddressAndPort=Yes` after changing the server address and port information, users need to use the /ipa and /ipp client startup switches to manually provide this information when they start the Messenger client, or they need to update the Address and Port values of the

\HKEY_CURRENT_USER\Software\Novell\Messenger\Login key in the Windows registry. Using the ForceAddressAndPort=Yes parameter makes life much easier for users. They are prompted to update their client software and the address and port information is automatically changed for them.

UseWindowsColors=

By default, the Messenger client uses its own custom color scheme. Specify Yes to use standard Windows colors instead.

ShowRememberPassword=

This setting controls whether the user sees the Remember Password option during the initial login to the client.

The default setting displays the Remember Password option on the Messenger Login window. Setting ShowRememberPassword to No causes the Remember Password option to not display during the initial login.

After the initial login, this option is controlled by its setting in the GroupWise Admin console.

[Languages]

The [Languages] section of the setup.cfg file enables you to control what languages are selected by default on the Language Selection page. Specify Yes for a language that you want selected by default. Specify No for each language that you want deselected by default. For example:

```
ChineseSimplified=No
Chinese=No
Czech=No
BrazilianPortuguese=No
Danish=No
Dutch=No
English=Yes
Finnish=No
French=Yes
German=Yes
...
```

If you suppress the Language Selection page, all selected languages are automatically installed on users' workstations.

[Show Dialogs]

The [Show Dialogs] section of the setup.cfg file enables you to control what interactions take place when users install the Messenger client for the first time. If you choose to suppress a page, use the corresponding parameter in the [NMSetup] section to provide the information that the Installation program needs from the suppressed page.

HideAllDialogs=

Specify Yes for a completely non-interactive installation of the Messenger client. Provide all required information in the [NMSetup] section.

SelectDestination=

Specify No to suppress the Choose Destination Location page during installation. Ensure you have set the Path= parameter to the location where you want the client software to be installed on users' workstations.

SelectProgramFolder=

Specify No to suppress the Select Program Folder page during installation. Ensure you have set the ProgramFolder= parameter to the item on the **Start** > **Programs** menu where you want the Messenger client to appear.

LanguageSelect=

Specify No to suppress the Language Selection page during installation. Ensure you have specified Yes for each language in the [Languages] section that you want to be installed on users' workstations.

SetupComplete=

Specify No to suppress the Setup Complete page at the end of the installation. If you suppress this page, users cannot review the Messenger client Readme. Ensure you have set the LaunchNow= and IconOnDesktop= parameters to control whether the client starts automatically and whether users have desktop icons to start the client.

Using Startup Switches When Starting the Messenger Client

In general, Messenger client users do not need to be concerned with startup switches. However, they can learn about client startup switches by looking up “startup options” in Messenger online help. The client startup switches are summarized below as a reference for administrators:

Windows Messenger Client	Linux/Mac Messenger Client
/background	-background
/import	-import
/initstatus	/initstatus
/ipa	-ipa
/ipp	-ipp
/keepalive	-keepalive
/l	-l
/u or /@u	-u or -@u

/background

Starts the Messenger client without displaying the main window. By default, the client displays its main window on the desktop.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/background	-background

/import

Specifies the name of a file containing Messenger contacts to import. The file is created in the Messenger client by using **File** > **Export Contact List**. The `.nmx` extension identifies the file as a Messenger contacts file. If the contacts file is not in the same directory where the client software is located, you must provide a full path name.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/import-[*directory*\\]*filename*.nmx	-import [/*directory*/]*filename*.nmx
Example:	/import-contacts.nmx /import-d:\shared\contacts.nmx	-import contacts.nmx -import /nm/contacts.nmx

/initstatus

Specifies your presence at the time of login. The possible values are Away, Busy, and Offline. Online is the default status if no initstatus argument is specified.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/initstatus-*presence*	-initstatus-*presence*
Example:	/initstatus-away	-initstatus-away

/ipa

Specifies the IP address or DNS hostname of the server where the Messaging Agent is running.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/ipa-*network_address*	-ipa *network_address*
Example:	/ipa-172.16.5.18 /ipa-nmserver	-ipa 172.16.5.19 -ipa nmserver2

On Windows, the Messenger user does not need to be aware of this information because the Messenger server Installation program adds the network address and port information to the `setup.cfg` file that it installs into the `\novell\nm\ma\software\client\win32` directory. When the user downloads the client software and installs it, the Messenger client Installation program reads the server information in the `setup.cfg` file and updates the Windows registry of the user's workstation with the information necessary for the Messenger client to start. This startup switch, as well as the `/ipp` switch, are only needed to override the server information automatically stored in the registry.

/ipp

Specifies the port number on which the Messaging Agent listens for service requests. By default, the port number is 8300.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/ipp-*port_number*	-ipp *port_number*
Example:	/ipp-8400	/ipp 8301

/keepalive

Overrides the current ping interval at which the Messenger client notifies the Messaging Agent that it is still active. The default interval is every 10 minutes or as specified by the Messaging Agent `/keepalive` startup switch. This regular communication between the Messaging Agent and the client prevents firewalls and routers from disconnecting connections that seem to be inactive. You can decrease the interval if a specific client user keeps getting unexpectedly disconnected. Use a setting of 0 (zero) to turn off the ping activity.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/keepalive-*minutes*	-keepalive-*minutes*
Example:	/keepalive-5	-keepalive 0

/l

Specifies the language to start the Messenger client in. By default, Messenger starts in the language of the operating system, if it is available. If the operating system language is not available, Messenger starts in English; however after it has started, you can choose a different language using **Tools** > **Options** > **User Interface Language**.

For the Windows client, this language is saved in the Windows registry and is used as the default thereafter. For the Cross-Platform client, it is saved in the Java preferences file for Messenger (`~/.java/.userPrefs/Novell/Messenger/prefs.xml` on Linux and `~/Library/Preferences/com.apple.java.util.prefs.plist` on Macintosh).

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/l *language_code*	-l *language_code*
Example:	/l-ru	-l de

Use one of the following language codes with the /l switch to select the language for Messenger:

Table 3-1 *Messenger Language Codes*

Language	Language Code
Czech	CS
Chinese-Simplified	zhCN

Language	Language Code
Chinese-Traditional	zhTW
Danish	DA
Dutch	NL
English	EN
Finnish	FI
French	FR
German	DE
Hungarian	HU
Italian	IT
Japanese	JA
Korean	KO
Norwegian	NO
Polish	PL
Portuguese	PT
Russian	RU
Spanish	ES
Swedish	SV

/u or /@u

Specifies the user name to log in to your Messenger system with.

	Windows Messenger Client	Linux/Mac Messenger Client
Syntax:	/u-*username* /@u-*username*	-*username* /@*username*
Example:	/u-LTanaka /@u-SJones	-u MPalu -@u GSmith

For the Windows client, the user's initial successful login is stored in the Windows registry and is used as the default thereafter. If multiple users regularly need to run Messenger from the same workstation, you could set up a shortcut on the desktop using the /u startup switch for each user. Within Messenger, one user can log out and another log in using **File** > **Log Out** > **Log In** as a Different User.

For the Cross-Platform client, the user information is saved in the Java preferences file for Messenger (`~/.java/.userPrefs/Novell/Messenger/prefs.xml` on Linux and `~/Library/Preferences/com.apple.java.util.prefs.plist` on Macintosh).

Using URL Commands in Your Web Browser on Windows

You can use URL commands in web pages and applications to make specific Windows Messenger client dialog boxes appear from those locations. Some URL commands take parameters. Use a question mark (?) between the command and the parameter. Use an ampersand (&) between multiple parameters.

The following URL commands are available:

- "nim:launchNM" on page 55
- "nim:startIm" on page 55
- "nim:addContact" on page 55
- "nim:import" on page 56
- "nim:invite" on page 56
- "nim:preferences" on page 56
- "nim:close" on page 56
- "nim:open" on page 56
- "nim:exit" on page 56

nim:launchNM

Starts Messenger.

nim:startIm

Opens the Send Instant Message dialog box so you can select a contact, or opens the Conversation dialog box, if you use parameters to specify a contact and, optionally, a message.

Syntax:

```
nim:startIm
nim:startIm?username=username
nim:startIm?username=username&message=message
```

Example:

```
nim:startIm
nim:startIm?username=LTanaka
nim:startIm?username=LTanaka&message=Good+morning
```

Use a plus (+) between words in the message. The message must not include spaces.

See also "nim:invite" on page 56.

nim:addContact

Opens the Find dialog box so you can search for a new contact, or adds the specified contact to the specified folder in the Messenger main window, if you use parameters to specify a contact and, optionally, a folder.

Syntax:

```
nim:addContact
nim:addContact?username=username
nim:addContact?username=username&Folder=folder_name
```

Example:

```
nim:addContact
nim:addContact?username=LTanaka
nim:addContact?username=LTanaka&foldername=Team+Members
```

If the folder name consists of more than one word, use a plus (+) between words instead of a space.

nim:import

Opens the Import Contact List dialog box so you can browse to and select a `.nmx` file, or immediately imports the contacts from the file into the Messenger main window, if you use a parameter to specify the `.nmx` file.

Syntax:

```
nim:import
nim:import?filename=filename
```

Example:

```
nim:import
nim:import?filename=c:\temp\contacts.nmx
```

nim:invite

Equivalent to nim:startIm.

nim:preferences

Opens the Options dialog box.

nim:close

Closes the Messenger main window but does not exit the Messenger client.

nim:open

Opens the Messenger main window after it has been closed.

nim:exit

Exits Messenger.

4 Managing Messenger Mobile Applications

GroupWise Messenger 18 allows users to connect to the Messenger system from their iOS, Android, and BlackBerry mobile devices by downloading and using native mobile applications. (For more information about how to use the Messenger mobile applications, see "Using Novell Messenger on Your Mobile Device" in the *GroupWise Messenger 18 Client User Guide*.)

This service is enabled by default with your Messenger system. However, you must submit a Certificate Signing Request (CSR) in order for Push notifications to be sent to iOS devices on your Messenger system. No special configuration is required for Push notifications to work with Android or BlackBerry devices.

- "Submitting a Certificate Signing Request" on page 57
- "Installing the Signed Certificate into Your Messenger System" on page 58
- "Configuring Novell Push Notification Service" on page 58
- "Allowing or Blocking Mobile Access for Users" on page 60
- "Managing Mobile Devices using MobileIron" on page 61

Submitting a Certificate Signing Request

You need to provide a client CSR that your Messenger system can use to communicate with the NPNS service. You can obtain this client CSR either by creating it yourself (by using tools such as OpenSSL) and importing it, or Micro Focus can create one for you.

- ❒ Sign in to the Micro Focus Portal (https://www.novell.com/npns) by using your Micro Focus customer account user name and password.
- ❒ (Recommended) Import a CSR.
  - ❒ From an OS X or Linux command prompt, run the following command:

    ```
    openssl req -nodes -newkey rsa:2048 -keyout novell.key -out novell.csr
    ```
  - ❒ Click **Import a CSR**.
  - ❒ Copy the contents of the `novell.csr` file into the CSR field.
  - ❒ Click **Validate**.
  - ❒ Continue with "Installing the Signed Certificate into Your Messenger System" on page 58.
- ❒ If you don't have a CSR, Micro Focus can create one for you.

  IMPORTANT: Using this method requires that Micro Focus generates the private key and sends it to you across the wire. This is a potential security vulnerability.

  However, the following points are important to understand:

  - Micro Focus does not store the private key.

* The private key that Micro Focus sends is SSL-encrypted.
* The private key can only be used to access the NPNS server; it cannot be used to access your Messenger system.

- ❒ Click **Create a key and certificate**.
- ❒ Specify your user information, then click **Generate**.

  The private key, signed certificate, and root certificate are available to be downloaded from the Micro Focus Portal.
- ❒ Download the private key, signed certificate, and root certificate by clicking **Download private key and certificates**. You will need these files when you install the signed certificate into the Messenger system.

  The key length encryption is 2048.
- ❒ Continue with "Installing the Signed Certificate into Your Messenger System" on page 58.

Installing the Signed Certificate into Your Messenger System

This section assumes that you have completed the steps in "Submitting a Certificate Signing Request" on page 57.

* Install the signed certificate into the Messenger system by copying the following items to the server where the Messaging Agent is installed:
  * The private key that was created when your CSR was generated (`npnsKey.pem`)
  * The signed certificate (`npnsCertificate.crt`) that you received from the Micro Focus Portal
  * The CA Certificate (`CertificateAuthority.crt`) that you received from the Micro Focus Portal
* Continue with "Configuring Novell Push Notification Service" on page 58.

Configuring Novell Push Notification Service

* "Understanding Novell Push Notification Service" on page 58
* "Configuring Novell Push Notification Service" on page 60

Understanding Novell Push Notification Service

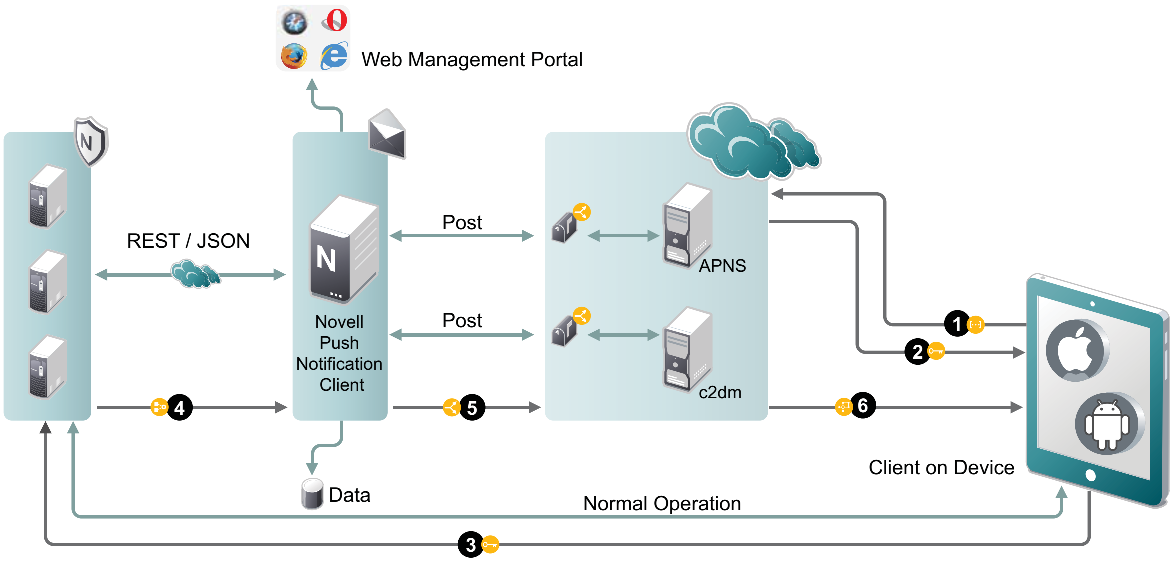
Novell Push Notification Service (NPNS) uses push technology through an open IP connection to push notifications from the server application to mobile devices when the app is no longer running. The end result is that notifications are immediately available on a user's mobile device, even when the device is asleep or when the app is in the background.

Android devices currently do not require NPNS to be enabled in order to receive push notifications.

For example, the GroupWise Messenger mobile application uses NPNS to push instant messages from the Messenger server to iOS mobile devices.

* "Flow Process for Novell Push Notification Service" on page 59
* "Supported Third-Party Push Notification Services" on page 59

Flow Process for Novell Push Notification Service



APNS:	Apple Push Notification Client
c2dm:	Google Push Notification Client
JSON:	JavaScript Object Notation

1. The application registers with the third-party push notification service (such as Apple Push Notification Service) via the client on the device.
2. The application receives a token key or URI from the third-party push notification service.
3. The application sends the token (along with other information) to the application server.
4. The application server relays the notification along with information about the device to NPNS.
5. NPNS sends the notification to the third-party push notification service.
6. The third-party push notification service sends the notification to the device.

Supported Third-Party Push Notification Services

NPNS can communicate with the following third-party push notification services:

- Apple Push Notification Services (APNS)

  When using Push notifications for iOS devices, consider the following:

  - Apple does not guarantee delivery of any Push notification. (However, Apple's Push notification service is quite reliable.)
  - When a device is turned off, Apple delivers only the last message that was sent. After the device is turned on and the user accesses Messenger, all messages are displayed.

- Google Push Notification Services (c2dm)

  GroupWise Messenger does not leverage Google Push Notification Services (c2dm) to accomplish Push to Android devices. Therefore, this is not required for Push notifications to work with Android.

Configuring Novell Push Notification Service

You need to configure Novell Push Notification Service (NPNS) if you have iOS devices in your environment. Android devices do not require NPNS to be enabled in order to receive push notifications.

Before you can enable NPNS, ensure the following:

- The certificates have been created as described in "Submitting a Certificate Signing Request" on page 57.
- The certificates have been copied to the Messenger server as described in "Installing the Signed Certificate into Your Messenger System" on page 58.
- The Messenger server can communicate to `https://npns.novell.com`. This it the server which sends the notification to the third-party push notification service as described in "Understanding Novell Push Notification Service" on page 58.

Follow the steps below to enable the NPNS service:

- ❒ In the GroupWise Admin Console **> Messenger > Messenger Service > Messaging Agents >** select the Messaging Agent.
- ❒ On the **Agent Settings** tab, in the **NPNS Settings** section, select, **Enable Novell Push Notification Service (NPNS) for mobile devices**, then specify the following information:

  Show message text in notification: Select this option to display the message text in the notification.

  Show sender's name in notification: Select this option to display the name of the user who sends the message in the notification.

  Root Certificate: Specify the path to the CA certificate for the NPNS service (`CertificateAuthority.crt`).

  Certificate: Specify the path to the signed certificate for the Messaging Agent (`npnsCertificate.crt`).

  Key: Specify the path to the private key that matches the signed certificate (`npnsKey.pem`).

  Set Key Password: Click this option to specify the password for the key if it has one.
- ❒ Click **Save**.
- ❒ Restart the Messaging Agent.

Allowing or Blocking Mobile Access for Users

You can enable or disable mobile access for all users, for a user policy, or for a certain user.

- ❒ The GroupWise Admin Console **> Messenger > MessengerService > Policy**, edit the default policy (all users), a user policy (users governed by the policy), or a go to **Users** and select a user.
- ❒ Select or deselect **Allow users to use Messenger mobile apps**.
- ❒ Click **Save**.

Managing Mobile Devices using MobileIron

You can manage the Messenger application on users' mobile device with MobileIron.

- "Adding and Configuring the Android App in MobileIron" on page 61
- "Adding and Configure the iOS App in MobileIron" on page 62
- "Distributing the Messenger App to Devices" on page 63

Adding and Configuring the Android App in MobileIron

To add the Android Messenger app to MobileIron, you need to upload the `.apk` file and then apply the Android label to the application. Once that is done, you need to add an AppConnect Container Policy and An AppConnect Configuration.

- ❒ Download the `.apk` file for the Messenger mobile app from the Micro Focus downloads site.
- ❒ Upload the file to MobileIron:
  - ❒ In the MobileIron Admin Portal, click the **Apps** tab.
  - ❒ On the **App Distribution Library** tab, in the **Select Platform** drop-down list, select **Android**.
  - ❒ Click **Add App**.
  - ❒ Follow the steps in the wizard to upload the app. Note the following:
    - **Distribution Type** is **In-house App**
    - **Silent Install** is not supported
    - **App Name**, **Display Version**, and **Code Version** cannot be changed.
- ❒ Apply the Android label to your app:
  - ❒ From the **App Distribution Library** tab on the **Apps** tab, select the Messenger App that you just created, then click **Actions** > **Apply To Label**.
  - ❒ Select **Android**.
- ❒ Create the AppConnect Container Policy:
  - ❒ In the MobileIron Admin Portal, click the **Policies & Configs** tab.
  - ❒ On the **Configurations** tab, select **Add New** > **AppConnect** > **Container Policy**.
  - ❒ Specify a **Name** and enter the **Package Name** for the **Application**. Fill in the rest of the information as desired.
- ❒ Create the AppConnect Configuration:
  - ❒ In the MobileIron Admin Portal, click the Policies & Configs tab.
  - ❒ On the **Configuration** tab, select **Add New** > **AppConnect** > **Configuration**.
  - ❒ Specify a **Name** and enter the **Package Name** for the **Application**. Fill in the rest of the information as desired.

    In the **App-specific Configurations** table, you can specify the following as Key-Value Pairs:
    - **server:** Specify the URL of your Messenger site. For example, messenger.acme.com.
    - **port:** Specify the port for your Messenger site.
    - **username:** Specify $USERID$ to cause MobileIron to automatically populate the app with the user's MobileIron user ID.

- **password:** Specify $PASSWORD$ to cause MobileIron to automatically populate the app with the user's MobileIron password.

Adding and Configure the iOS App in MobileIron

To add the iOS Messenger app to MobileIron, you need to import the app from the Apple Appstore and then apply the iOS label to the application. Once that is done, you need to add an AppConnect Container Policy and An AppConnect Configuration.

- ❒ Import the app from the Apple Appstore.
  - ❒ In the MobileIron Admin Portal, click the **Apps** tab.
  - ❒ On the **App Distribution Library** tab, in the **Select Platform** drop-down list, select **iOS**.
  - ❒ Click **App Store Import**.
  - ❒ In the App Store Search dialog box, enter `GroupWise Messenger`, select the correct country for the App Store, and click **Search**.
  - ❒ Click **Import** next to the GroupWise Messenger app, then click **OK**.
- ❒ Apply the iOS label to your application:
  - ❒ From the **App Distribution Library** tab on the **Apps** tab, select the GroupWise Messenger app that you just created, then click **Actions** > **Apply To Label**.
  - ❒ Select **iOS**.

  Once this is done, click the **Edit** icon next to GroupWise Messenger and note the **iTunes Store Id** or the **Bundle Identifier**.
- ❒ Create the AppConnect Container Policy:
  - ❒ In the MobileIron Admin Portal, click the **Policies & Configs** tab.
  - ❒ On the **Configurations** tab, select **Add New** > **AppConnect** > **Container Policy**.
  - ❒ Specify a **Name** and enter the **iTunes Store ID** or the **Bundle Identifier** for the **Application**. Fill in the rest of the information as desired.
- ❒ Create the AppConnect Configuration:
  - ❒ In the MobileIron Admin Portal, click the Policies & Configs tab.
  - ❒ On the **Configuration** tab, select **Add New** > **AppConnect** > **Configuration**.
  - ❒ Specify a **Name** and enter the **iTunes Store ID** or the **Bundle Identifier** for the **Application**. Fill in the rest of the information as desired.

    In the **App-specific Configurations** table, you can specify the following as Key-Value Pairs:
    - **server:** Specify the URL of your Messenger site. For example, messenger.acme.com.
    - **port:** Specify the port for your Messenger site.
    - **username:** Specify $USERID$ to cause MobileIron to automatically populate the app with the user's MobileIron user ID.

Distributing the Messenger App to Devices

You need to distribute the Messenger app to devices in your organization via MobileIron if this is the first time your organization is using MobileIron with Messenger, or any time a new device enters the organization.

It is possible that some users independently download the Messenger app from the app store before their device is managed by MobileIron. In this case, you still need to push the app to their device via MobileIron. These devices will loose any history within the Messenger app after their device becomes managed and the Messenger app is pushed to their device.

5 Enabling and Managing Archiving

The Messaging Agent passes completed conversations to the Archive Agent for storage on disk. The Archive Agent saves the conversations, indexes them, and searches them when requested by authorized Messenger client users. If you do not need to archive everyone's conversations, you can set up a policy to determine whose conversations are archived and whose are not.

Archiving is optional. Because all users' conversations are stored together in the Messenger archive, archiving is only necessary if you need to retain conversations for legal reasons, such as to comply with a corporate email retention policy that has been extended to instant messages.

The following sections help you enable and manage archiving in your Messenger system:

- "Starting the Archive Agent" on page 65
- "Enabling Archiving in Your Messenger System" on page 66
- "Granting Authorized User Access to the Archive" on page 66
- "Configuring the Archive Agent in the GroupWise Admin Console" on page 66
- "Enhancing Archive Security with SSL Encryption" on page 67
- "Configuring and Indexing the Messenger Archive" on page 68
- "Establishing Archive Maintenance" on page 69
- "Monitoring the Archive Agent" on page 69
- "Optimizing Archive Agent Performance" on page 70
- "Managing the Archive Server" on page 72
- "Using Archive Agent Startup Switches" on page 74

Starting the Archive Agent

When you finish creating your Messenger system, the Installation program can start the Messenger agents for you. To start the Archive agent manually, do the following:

- ❒ In a terminal, become `root`.
- ❒ Run the following:

```
systemctl start gwm-nmaa.service
```

Enabling Archiving in Your Messenger System

If you want to archive the conversations of all Messenger users, select **Archive Sessions** on the General page of the Default Policy object, as described in "Editing the Default User Policy" on page 38. After you edit the default policy, you must stop and then start the Messenger agents in order to put the modified policy into effect throughout your Messenger system. Thereafter, the next time users log in to the Messenger system, their conversations are archived.

If you want to archive the conversations of some users but not others, you must create a policy that lists the users whose conversations you want to archive, as described in "Creating a User Policy" on page 38. You do not need to stop and then start the Messenger agents after creating the new policy. The next time the users governed by the policy log in to the Messenger system, their conversations are archived.

When users' conversations are being archived, the GroupWise Messenger client displays a page icon notifying users that their conversations are being logged into the archive.

Granting Authorized User Access to the Archive

The Messenger archive is a single archive containing the conversations of all Messenger users for whom archiving is enabled. Therefore, access to the archive should be granted only to users who can appropriately view everyone's conversations. Users who can search the Messenger archive must be added to the Messenger access control list (ACL).

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Settings > Archive Settings**, in the Archive ACL heading, click **Add**.
- ❒ Browse to and select those users that you want to grant access to the Messenger archive.
- ❒ Click **Save**.
- ❒ Restart the Archive Agent to put the access control list into effect.
- ❒ Have authorized users log out and back in to the Messenger system in order to add the Search Archive item on the File menu.

Configuring the Archive Agent in the GroupWise Admin Console

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Archive Agents >** select the Archive Agent.

The table below summarizes the Archive Agent configuration settings in the Archive Agent object property pages and how they correspond to Archive Agent startup switches (as described in "Using Archive Agent Startup Switches" on page 74):

Table 5-1 *Archive Agent Configuration Settings*

GroupWise Admin console Properties Pages and Settings	Corresponding Tasks and Startup Switches
General Page	

GroupWise Admin console Properties Pages and Settings	Corresponding Tasks and Startup Switches
Work Path	See "Moving the Archive Agent Working Directory" on page 72.
Enable Messenger Services	Turns on and turns off the availability of archiving and archive searching for Messenger users.
Enable SNMP	See "Using SNMP Monitoring Programs" on page 70. See also /nosnmp.
Agent Settings Page	
IP Address DNS Host Name Bind to This Address Client/ Server Port Message Transfer Port Description	Displays the Archive Agent server information established during installation.
HTTP Port HTTP Username HTTP Password Enable SSL for Web Console	"Using the Archive Agent Web Console and GroupWise Monitor" on page 70. See also /httpport, /httpuser, /httppassword, and /httpssl.
Maximum Number of Users Client/Server Threads	See "Optimizing Archive Agent Performance" on page 70. See also /maxconns and /threads.
Queue Path Passphrase Delay Interval Expire	See "Moving the Archive Queue Directories" on page 73. See also /queue. See "Maintaining the Archive Store" on page 73.
Log Settings Page	
Log Level Enable Disk Logging Log Files Path Log Maximum Age Log Maximum Size	See "Using Archive Agent Log Files" on page 70. See also /loglevel, /log, /logdays, /logmax, and /logdiskoff.
SSL Settings Page	
Certificate Path SSL Certificate SSL Key File Set Password Enable SSL for Client/Server Enable SSL for Message Transfer Protocol	See "Enhancing Archive Security with SSL Encryption" on page 67. See also /certpath, /certfile, /keyfile, /keypassword, and /ssl.
File Module Page	
Store path Maximum file size QuickFinder Maintenance	See "Configuring and Indexing the Messenger Archive" on page 68.

Enhancing Archive Security with SSL Encryption

Messenger archive security is initially established with the archive passphrase. The passphrase enables the Archive Agent to encrypt conversations as they are saved on disk.

Secure Sockets Layer (SSL) ensures secure communication between programs by encrypting the complete communication flow between the programs. The Installation program required configuring the messaging agent for SSL encryption, as described in "Installing a GroupWise Messenger System" in the *GroupWise Messenger 18 Installation Guide*.

You can also modify the SSL cipher suite if you need to disable certain ciphers that do not work in your environment. The ciphers suite can be modified both on the Archive Agent and the Messaging agent.

IMPORTANT: Unless you are required to modify the cipher suite for your environment, consider carefully before you make any changes as this decreases the security of your Messenger system.

The cipher list must be in OpenSSL format. For more information on OpenSSL format, see Cipher List Format (https://www.openssl.org/docs/man1.0.2/apps/ciphers.html).

To modify the SSL cipher suite use the /sslciphersuite startup switch.

Configuring and Indexing the Messenger Archive

Information about the Messenger archive is stored in the File Module object in the Archive Agent container.

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Archive Agents,** select your Archive Agent.
- ❒ Select the **File Module** tab.
- ❒ Fill in the following fields to configure the Messenger Archive:

  Store Path: Specify the full path to the directory where you want the archive created.

  By default, the archive is created in the store subdirectory of the Archive Agent installation directory. You should choose a location that has adequate disk space to store the expected volume of conversations for the amount of time for which they must be retained. If you need to move an existing archive to a location where additional disk space is available, see "Moving the Archive" on page 72.

  Maximum File Size: Specify the maximum size of the archive file. The default is 10 MB compressed.

  When an archive file reaches this size, a new archive file is started.
- ❒ Fill in the following fields to configure QuickFinder indexing for the archive:

  Delay: Specify the number of hours after midnight when you want the Archive Agent to begin its first indexing cycle for the day. The default is 2 hours after midnight (2:00 a.m.).

  Update Interval: Specify the number of hours between indexing cycles. The default is 4 hours. So, by default, the Archive Agent indexes conversations at 2:00 a.m., 6:00 a.m., 10:00 a.m., 2:00 p.m., 6:00 p.m., and 10:00 p.m. Increase the interval to index less frequently; decrease the interval to index more frequently. One hour is the smallest indexing interval you can specify.

  Compress Interval: Specify the number of hours between index compression cycles. The default is 24 hours (once a day at the time specified in the **Delay** field).
- ❒ Click **Save**.
- ❒ Restart the Archive Agent to put the settings into effect.

From the Archive Agent console and Web Console, you can perform indexing and compression for the archive at any time. See "Using the Archive Agent Web Console and GroupWise Monitor" on page 70.

Establishing Archive Maintenance

The Messenger archive is stored in a database format that requires occasional maintenance:

- "Expiring Old Conversations" on page 69
- "Repairing the Archive" on page 69

Expiring Old Conversations

It might not be practical to store all conversations indefinitely. Establishing archive maintenance procedures keeps your archive current and eliminates obsolete conversations.

❒ In the GroupWise Admin console **> Messenger > MessengerService > Settings**, select **Archive Settings**.

❒ Fill in the following fields in **Store Maintenance** to control when the Archive Agent performs maintenance on the archive, including when old conversations are expired and deleted from the Messenger archive and when the expiration process takes place.

Delay: Specify the number of hours after midnight when you want the Archive Agent to perform maintenance. The default is 2 hours after midnight (2:00 a.m.).

Interval: Specify how often to perform maintenance. The default is 4 hours.

Expire: Specify the number of days you want to keep conversations in the archive. The default is 90 days. Specify 0 (zero) to disable expiration and retain all conversations indefinitely.

❒ Click **Save**.

❒ Restart the Archive Agent to put the maintenance settings into effect.

When the Archive Agent expires conversations, it does not reduce the physical size of the Messenger archive. However, the archive does not grow again until the space reclaimed by expiring conversations has been filled.

Repairing the Archive

If the Messenger archive is damaged for any reason, you can repair it at the Archive Agent console and Web Console. For instructions, see "Using the Archive Agent Web Console and GroupWise Monitor" on page 70.

Monitoring the Archive Agent

By monitoring the Archive Agent, you can determine whether its current configuration is meeting the archiving and indexing needs being placed upon it. You have a variety of tools to help you monitor the operation of the Archive Agent:

- "Using the Archive Agent Web Console and GroupWise Monitor" on page 70
- "Using Archive Agent Log Files" on page 70
- "Using SNMP Monitoring Programs" on page 70

Using the Archive Agent Web Console and GroupWise Monitor

The Archive Agent Web Console enables you to monitor and control the Archive Agent from any location where you have access to a browser and the Internet. This provides substantially more flexible access than the Archive Agent Web Console, which can only be accessed from the server where the Archive Agent is running.

You can use the same procedure to set up the Archive Agent Web Console as the Messaging Agent Web Console. For instructions, see "Using the Messaging Agent Web Console" on page 17. In addition, you can compress the archive indexes and perform maintenance on the archive from the Web Console.

As with the Messaging Agent, you can access the Archive Agent Web Console console from GroupWise Monitor. For setup and usage instructions, "Using GroupWise Monitor" on page 20.

Using Archive Agent Log Files

Error messages and other information about the Archive Agent are written to log files as well as displaying on the Archive Agent console. Log files can provide a wealth of information for resolving problems with Archive Agent functioning. On Windows, the default location for log files is the `logs` subdirectory of the Archive Agent installation directory. On Linux, the default location is `/var/opt/novell/log/messenger/aa`.

You can use the same procedure for Archive Agent log files as for Messaging Agent log files. For instructions, see "Using Messaging Agent Log Files" on page 19.

Using SNMP Monitoring Programs

You can monitor the Archive Agent from the Management and Monitoring component of any SNMP management and monitoring program. When properly configured, the Archive Agent sends SNMP traps to network management consoles for display along with other SNMP monitored programs. It also responds to requests for configuration and status information from SNMP management and monitoring programs.

You can use the same procedure for setting up the Archive Agent as for the Messaging Agent. For instructions, see "Using SNMP Monitoring Programs" on page 20.

Optimizing Archive Agent Performance

Before attempting optimization, you should run the Archive Agent long enough to observe its efficiency and its impact on other network applications running on the same server. See "Monitoring the Archive Agent" on page 69.

Also, remember that optimizing your network hardware and operating system can make a difference in Archive Agent performance.

- "Optimizing Connections between the Archive Agent and Messenger Users" on page 71
- "Optimizing the Connection between the Archive Agent and the Messaging Agent" on page 71

Optimizing Connections between the Archive Agent and Messenger Users

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Archive Agents**, select the Archive Agent.
- ❒ On the **Agent Settings** tab, fill in the following fields under **Performance Preferences** to configure how the Archive Agent communicates with Messenger users:

  Maximum Number of Users: Specify the maximum number of Messenger users that you want the Archive Agent to be able to search the archive for at once. The default is 5120, which should be adequate for a very large Messenger system.

  Client/Server Threads: Specify the number of client/server threads that you want the Archive Agent to start. The Archive Agent uses its client/server threads to search the archive for Messenger users, to communicate with the Messaging Agent in order to receive conversations to archive, and to maintain and index the archive.

  The default number of client/server threads is 15. For a large Messenger system with archiving enabled for all users, you could increase the number to 50 or more, depending on the system resources of the server where the Archive Agent is running.
- ❒ Click **Save**.
- ❒ Restart the Messaging Agent to put the new performance settings into effect.

Corresponding Startup Switches: You can also use the /maxconns and /threads startup switches in the Archive Agent startup file to configure Archive Agent performance.

Optimizing the Connection between the Archive Agent and the Messaging Agent

By default, the Messaging Agent waits 5 seconds for a response when trying to contact the Archive Agent. If no response is received from the Archive Agent, the Messaging Agent tries again three more times. If all four attempts fail, the Messaging Agent reports an error, then waits 10 minutes before it tries again.

When the Messaging Agent attempts to send conversations to the Archive Agent, the Messaging Agent tries for 20 seconds before reporting an error.

On some networks, these wait intervals might not be sufficient when the Messaging Agent and the Archive Agent are running on different servers. As a result, the Messaging Agent might report an error when, by waiting longer, the needed connection or data transfer can take place.

Use the /mtpconnecttimeout switch in the Messaging Agent startup file to increase the number of seconds the Messaging Agent waits for a response from the Archive Agent before reporting an error.

Use the /mtpdatatimeout switch in the Messaging Agent startup file to increase the number of seconds the Messaging Agent attempts to send conversations to the Archive Agent before reporting an error.

Managing the Archive Server

As your Messenger system grows and evolves, you might need to reconfigure the server where the Archive Agent runs or move Archive Agent directories to different locations.

- "Binding the Archive Agent to a Specific IP Address" on page 72
- "Changing the Archive Server's IP Address or DNS Host Name" on page 72
- "Moving the Archive Agent Working Directory" on page 72
- "Moving the Archive" on page 72
- "Maintaining the Archive Store" on page 73
- "Moving the Archive Queue Directories" on page 73

Binding the Archive Agent to a Specific IP Address

On a server with multiple IP addresses, the Archive Agent binds to all available IP addresses, and Messenger clients can communicate with the Archive Agent on all available IP addresses unless you bind it to a specific address.

You can use the same procedure to bind the Archive Agent as you use to bind the Messaging Agent. See "Binding the Messaging Agent to a Specific IP Address" on page 22.

Changing the Archive Server's IP Address or DNS Host Name

If you change the IP address or DNS hostname of the server where the Archive Agent is running, you must update the server information for your Messenger system as well.

You can use the same procedure for the Archive Agent as for the Messaging Agent. See "Changing the Messaging Server's Network Address" on page 22.

Moving the Archive Agent Working Directory

The Archive Agent uses its working directory for saving various temporary files during archiving and indexing. By default, the Archive Agent and the Messaging Agent share the same working directory if they are running on the same server.

You can use the same procedure to move the Archive Agent working directory as you use to move the Messaging Agent working directory. See "Moving the Messaging Agent Working Directory" on page 23.

Moving the Archive

Depending on the volume of conversations to archive and the length of time conversations must be retained, the Messenger archive can grow to be quite large. The default location is `/var/opt/novell/messenger/aa/store`. If necessary, you can move it to a different location where more disk space is available. However, the archive must reside on the same server where the Archive Agent runs.

- ❒ Stop the Archive Agent.
- ❒ Copy the Messenger archive (store directory) to the desired location.

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Archive Agents**, select the Archive Agent.
- ❒ In the **File Module > Store Path** field, browse to and select the new location of the Messenger archive.
- ❒ Click **Save**.
- ❒ Start the Archive Agent.
- ❒ Delete and regenerate the archive indexes from the Archive Agent console.

Maintaining the Archive Store

When messages are added to the archive store, they are not immediately indexed. Before a user can search for a message in the archive, it must be indexed. You can set when the store starts indexing, the interval time between indexing, and how long a message should be kept in the archive.

- ❒ Stop the Archive Agent.
- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Archive Agents**, select the Archive Agent.
- ❒ On the **File Module** tab, edit the settings under **QuickFinder Maintenance** as desired.
  - In the **Delay** field, select the number of hours to wait until the first index is created, based upon how many hours after 12 a.m.
  - In the **Update interval** field, select the number of hours to wait between indexings.
  - In the **Compress interval** field, select the number of hours between QuickFinder compression.
- ❒ Click **Save**.
- ❒ Start the Archive Agent.

Moving the Archive Queue Directories

When archiving is enabled, the Messaging Agent passes conversations to the Archive Agent when the conversations are completed. If the Messaging Agent cannot communicate with the Archive Agent when it has a conversation to archive, it saves the conversation in its holding directory (queue) until it can communicate with the Archive Agent again. When the Archive Agent receives a conversation to archive, if it is already busy processing other conversations, it temporarily stores the conversation in its holding directory (queue). Either of these holding queues can be moved if necessary.

- "Moving the Messaging Agent Conversation Holding Queue" on page 73
- "Moving the Archive Agent Conversation Holding Queue" on page 74

Moving the Messaging Agent Conversation Holding Queue

The default location for the Messaging Agent holding queue is `/var/opt/novell/messenger/ma/queue`.

To move the Messaging Agent queue:

- ❒ Stop the Messaging Agent.

- ❒ If there are conversations waiting to be passed to the Archive Agent, copy the Messaging Agent queue directory and its contents to the desired location.
- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Messaging Agents**, select the Messaging Agent.
- ❒ On the **Agent Settings** tab in the **Messaging Queue Path** field, browse to and select the new location of the Messaging Agent queue.
- ❒ Click **Save**.
- ❒ Start the Messaging Agent.

Moving the Archive Agent Conversation Holding Queue

The default location for the Archive Agent holding queue is `/var/opt/novell/messenger/aa/queue`.

- ❒ Stop the Archive Agent.

  While the Archive Agent is stopped, the Messaging Agent is storing conversations to archive in its holding queue.
- ❒ If there are conversations waiting to be archived in the Archive Agent holding queue, copy the Archive Agent queue directory and its contents to the new location.
- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Archive Agents**, select the Archive Agent.
- ❒ On the **Agent Settings** tab in the **Queue Path** field, browse to and select the new location of the Archive Agent holding queue.
- ❒ Click **Save**.
- ❒ Start the Archive Agent.

Using Archive Agent Startup Switches

You can override settings provided in the GroupWise Admin console by using startup switches in the Archive Agent startup file (`strtup.aa`). On Windows, the startup file is located in the Messenger Agent installation directory. On Linux, the startup file is located in `/etc/opt/novell/messenger`. You can override startup switches provided in the startup file by using startup switches on the command line. For more information about starting the Archive Agent, see "Starting the Archive Agent" on page 65.

This section contains information on the following Archive Agent startup switches:

- "/certfile" on page 76
- "/certpath" on page 77
- "/dhparm" on page 77
- "/httppassword" on page 77
- "/httpport" on page 77
- "/httpssl" on page 78
- "/httpuser" on page 78
- "/ip" on page 78

* "/keyfile" on page 78
* "/keypassword" on page 79
* "/language (Windows only)" on page 79
* "/log" on page 80
* "/logdays" on page 80
* "/logdiskoff" on page 80
* "/loglevel" on page 80
* "/logmax" on page 81
* "/maxconns" on page 81
* "/mtpipaddr" on page 81
* "/mtpport" on page 82
* "/mtpssl" on page 82
* "/nomtp" on page 82
* "/nosnmp" on page 82
* "/password" on page 82
* "/port" on page 83
* "/productinfo" on page 83
* "/queue" on page 83
* "/sslciphersuite" on page 84
* "/ssloption" on page 84
* "/threads" on page 84
* "/user" on page 84

The table below summarizes the Archive Agent startup switches and how they correspond to configuration settings in the GroupWise Admin console. These startup switches must begin with a dash (-) when used in the Cross-Platform client.

Table 5-2 *Archive Agent Startup Switches*

Linux Archive Agent	Windows Archive Agent	GroupWise Admin console Setting
--certfile	/certfile	SSL Certificate
--certpath	/certpath	Certificate Path
--dhparm	/dhparm	N/A
--httppassword	/httppassword	HTTP Password
--httpport	/httpport	HTTP Port
--httpuser	/httpuser	HTTP Username
--httpssl	/httpssl	Enable SSL for Web Console
--ip	/ip	Host IP Address with Bind to this Address selected
--keyfile	/keyfile	SSL Key File
--keypassword	/keypassword	SSL Set Password

Linux Archive Agent	Windows Archive Agent	GroupWise Admin console Setting
--language	/language	N/A
--log	/log	Log Files Path
--logdays	/logdays	Log Maximum Age
--logdiskoff	/logdiskoff	Enable Disk Logging
--loglevel	/loglevel	Log Level
--logmax	/logmax	Log Maximum Size
--maxconns	/maxconns	Maximum Number of Users
--mtpipaddr	/mtpipaddr	Host Address
--mtpport	/mtpport	Message Transfer Port
--mtpssl	/mtpssl	Enable SSL for Message Transfer Protocol
--nomtp	/nomtp	N/A
--nosnmp	/nosnmp	Enable SNMP
--password	/password	Set Password
--port	/port	Client/Server Port
--productinfo	/productinfo	N/A
--queue	/queue	Messaging Queue Path
--sslciphersuite	/sslciphersuite	N/A
--ssloption	/ssloption	N/A
--threads	/threads	Client/Server Threads
--user	/user	Username

/certfile

Specifies the full path to the certificate file used to provide secure SSL communication between the Archive Agent and other programs. See "Enhancing Archive Security with SSL Encryption" on page 67.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--certfile /*dir*/*file*	/certfile-[*drive*:]*dir**file* /certfile-*svr**sharename**dir**file*
Example:	--certfile /certs/gw.crt	/certfile-\novell\nm\ma\certs\nm.crt /certfile-m:\novell\nm\ma\certs\nm.crt /certfile-\\\\s2\c\novell\nm\ma\certs\nm.crt

See also /certpath, /keyfile, and /keypassword.

/certpath

Specifies the full path to the directory where certificate files are stored on your system. See "Enhancing Archive Security with SSL Encryption" on page 67.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--certpath /*dir*	/certpath-[*drive*:]*dir* /certpath-*svr**sharename**dir*
Example:	--certpath /certs	/certpath-\novell\nm\aa\certs /certpath-m:\novell\nm\aa\certs /certpath-\\\\svr2\c\novell\nm\aa\certs

See also /certfile, /keyfile, and /keypassword.

/dhparm

Specifies a Diffie-Hellman cipher parameters file used for SSL/TLS to replace the default parameters set by Messenger. Messenger uses default Diffie-Hellman parameters of 2048 bits to generate the DH key. A valid DH parameter is in PEM format.

	Linux Archive Agent	Windows Messaging Agent
Syntax:	--dhparm *directory*/*pemfile*	/dhparm *directory*/*pemfile*
Example:	--dhparm /var/tmp/dh.pem	/dhparm C:\temp\dh.pem

/httppassword

Specifies the password for the Archive Agent to prompt for before allowing Archive Agent status information to be displayed in your browser. Unless you are using SSL encryption, do not use an existing eDirectory password because the information passes over the connection between your browser and the Archive Agent. See "Using the Archive Agent Web Console and GroupWise Monitor" on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--httppassword *unique_password*	/httppassword-*unique_password*
Example:	--httppassword AgentWatch	/httppassword-AgentWatch

See also /httpuser.

/httpport

Sets the HTTP port number used for the Archive Agent to communicate with your browser. The setting must be unique on the server where the Archive Agent runs. See "Using the Archive Agent Web Console and GroupWise Monitor" on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--httpport *port_number*	/httpport-*port_number*
Example:	--httpport 8314	/httpport-8315

/httpssl

Sets the availability of SSL encryption between the Archive Agent and the Web Console displayed in your browser. Valid values are enable and disable. See "Using the Archive Agent Web Console and GroupWise Monitor" on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--httpssl *setting*	/httpssl-*setting*
Example:	--httpssl enable	/httpssl-enable

/httpuser

Specifies the user name for the Archive Agent to prompt for before allowing Archive Agent status information to be displayed in a browser. Providing a user name is optional. Unless you are using SSL encryption, do not use an existing eDirectory user name because the information passes over the connection between your browser and the Archive Agent. See "Using the Archive Agent Web Console and GroupWise Monitor" on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--httpuser *unique_username*	/httpuser-*unique_username*
Example:	--httpuser NMWebConsole	/httpuser-NMWebConsole

See also /httppassword.

/ip

Binds the Archive Agent to a specific IP address when the server where it runs uses multiple IP addresses, such as in a clustering environment. Without the /ip switch, the Archive Agent binds to all available IP addresses and Messenger clients can communicate with the Messaging Agent on all available IP addresses.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--ip *IP_address*	/ip-*IP_address*
Example:	--ip 172.16.5.19	/ip-172.16.5.20

/keyfile

Specifies the full path to the private file used to provide SSL encryption between the Archive Agent and other programs. See "Enhancing Archive Security with SSL Encryption" on page 67.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--keyfile /*dir*/*file*	/keyfile-[*drive*:]*dir**file* /keyfile-*svr**sharename**dir**file*
Example:	--keyfile /certs/gw.key	/keyfile-\novell\nm\ma\certs\nm.key /keyfile-m:\novell\nm\ma\certs\nm.key /keyfile-\\\\svr2\c\novell\nm\ma\certs\nm.key

See also /keypassword.

/keypassword

Specifies the password used to encrypt the private SSL key file when it was created. See "Enhancing Archive Security with SSL Encryption" on page 67.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--keypassword *password*	/keypassword-*password*
Example:	--keypassword gwssl	/keypassword-gwssl

See also /keyfile.

/language (Windows only)

Specifies the language to run the Archive Agent in, using a two-letter language code as listed below. When you install the Messenger agents, all language versions are automatically installed.

The initial default is the language used by the operating system. If that language is not available, the Archive Agent runs in English. You only need to use this switch if you need to override these defaults.

	Linux Archive Agent	Windows Archive Agent
Syntax:	N/A	/language-*code*
Example:	N/A	/language-fr

The table below lists the valid language codes:

Language	Language Code
English	EN
French	FR
German	DE
Portuguese	PT
Spanish	ES

/log

Specifies the directory where the Archive Agent stores its log files. The default location is the `\novell\nm\aa\log` directory. See “Using Archive Agent Log Files” on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--log /*dir*	/log-[*drive*:]*dir* /log-*svr**sharename**dir*
Example:	--log /nm/log/aa	/log-\nmlog\aa /log-m:\nmlog\aa /log-\\\\server2\c\mail\nmlog\aa

See also /loglevel, /logdays, /logmax, and /logdiskoff.

/logdays

Specifies how many days to keep Archive Agent log files on disk. The default is 14 days. See “Using Archive Agent Log Files” on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--logdays *days*	/logdays-*days*
Example:	--logdays 30	/logdays-30

See also /log, /loglevel, /logmax, and /logdiskoff.

/logdiskoff

Turns off disk logging for the Archive Agent so that no information about the functioning of the Archive Agent is stored on disk. The default is for logging to be turned on. See “Using Archive Agent Log Files” on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--logdiskoff	/logdiskoff

See also /log, /loglevel, /logdays, and /logmax.

/loglevel

Controls the amount of information logged by the Archive Agent. Logged information is displayed in the log message box and written to the Archive Agent log file during the current agent session. The default is Normal, which displays only the essential information suitable for a smoothly running Archive Agent. Use Verbose to display the essential information, plus additional information helpful for troubleshooting. Use Diagnostic to include code-specific information. See “Using Archive Agent Log Files” on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--loglevel *level*	/loglevel-*level*
Example:	--loglevel diagnostic	/loglevel-diagnostic

See also /log, /logdays, /logmax, and /logdiskoff.

/logmax

Sets the maximum amount of disk space for all Archive Agent log files. When the specified disk space is consumed, the Archive Agent deletes existing log files, starting with the oldest. The default is 128 MB. See "Using Archive Agent Log Files" on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--logmax *megabytes*	/logmax-*megabytes*
Example:	--logmax 256	/logmax-256

See also /log, /loglevel, /logdays, and /logdiskoff

/maxconns

Specifies the maximum number of connections between the Archive Agent and Messenger clients. The default is 5120. See "Optimizing Connections between the Archive Agent and Messenger Users" on page 71.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--maxconns *connections*	/maxconns-*connections*
Example:	--maxconns 10000	/maxconns-10000

See also /threads.

/mtpipaddr

Specifies the network address of the Server where the Messaging Agent runs, as either an IP address or a DNS hostname.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--mtpipaddr *network_address*	/mtpipaddr-*network_address*
Example:	--mtpipaddr-172.16.5.19 --mtpipaddr server3	/mtpipaddr-172.16.5.20 /mtpipaddr-server4

See also /mtpport.

/mtpport

Specifies the message transfer port number on which the Archive Agent listens for conversations to archive.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--mtpport *port_number*	/mtpport-*port_number*
Example:	--mtpport 8413	/mtpport-8413

See also /mtpipaddr.

/mtpssl

Sets the availability of SSL encryption between the Archive Agent and the Messaging Agent. Valid values are enable and disable. See “Enhancing Archive Security with SSL Encryption” on page 67.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--mtpssl *setting*	/mtpssl-*setting*
Example:	--mtpssl enable	/mtpssl-enable

/nomtp

Disables the Archive Agent's attempts to contact the Messaging Agent.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--nomtp	/nomtp

/nosnmp

Disables SNMP for the Archive Agent. The default is to have SNMP enabled. See “Using SNMP Monitoring Programs” on page 70.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--nosnmp	/nosnmp

/password

Provides the password for the Archive Agent to use when accessing eDirectory in order to obtain its configuration information from the Archive Agent object. This switch is required in order to start the Archive Agent. See “Starting the Archive Agent” on page 65.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--password *eDirectory_password*	/password-*eDirectory_password*
Example:	--password NMAgent	/password-NMAgent

See also /user.

/port

Sets the port number on which the Archive Agent listens for service requests from Messenger clients. The default is 8310. See "Configuring the Archive Agent in the GroupWise Admin Console" on page 66.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--port *port_number*	/port-*port_number*
Example:	--port 8411	/port-8412

/productinfo

Sets the level of anonymous product information is sent to Micro Focus. The level is initially set during the install or upgrade. The following options are available:

- **0:** Turns off anonymous product information collection.
- **1:** Enables basic collection which collects the uptime, product version, OS type, and number of peak users.
- **2:** Enables basic collection additional data collection which adds message traffic, chat room usage, number of conversations, and other similar information.

	Linux Messaging Agent	Windows Messaging Agent
Syntax:	--productinfo=*value*	/productinfo-*value*
Example:	--productinfo=1	/productinfo-1

/queue

Specifies the directory where the Archive Agent stores conversations it receives from the Messaging Agent while it is archiving other conversations. The default is `\novell\nm\aa\queue`. See "Moving the Archive Agent Conversation Holding Queue" on page 74.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--queue /*dir*	/queue-[*drive*:]*dir* /queue-*svr**sharename**dir*\\
Example:	--queue /nmqueues/aa	/queue-\nmqueues\aa /queue-m:\nmqueues\aa /queue-\\\\server2\c\mail\nmqueues\aa

/sslciphersuite

Sets the SSL cipher suites used by the Archive Agent, the Messaging Agent, and Messenger clients. The cipher list must be in OpenSSL format. For more information on OpenSSL format, see Cipher List Format (https://www.openssl.org/docs/man1.0.2/apps/ciphers.html)

	Linux Archive Agent	Windows Archive Agent
Syntax:	--sslciphersuite *“setting”*	/sslciphersuite-*”setting*”
Example:	--sslciphersuite “HIGH:!AECDH:!EXP:@STRENGTH”	/sslciphersuite-”HIGH:!AECDH:!EXP:@STRENGTH”

See also /certpath, /certfile, /keyfile, and /keypassword.

/ssloption

Specify a specific SSL protocol to disable. By specifying SSL_OP_NO_TLSv1, GroupWise will disable TLSv1 support. Specify additional options by adding the SSL key work separated by a comma.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--ssloption *SSL_protocol*	/ssloption *SSL_protocol*
Example:	--ssloption SSL_OP_NO_TLSv1,SSL_OP_NO_TLSv1_1	/ssloption SSL_OP_NO_TLSv1,SSL_OP_NO_TLSv1_1

/threads

Specifies the maximum number of client/server threads the Archive Agent can create. The default is 15. See “Optimizing Connections between the Archive Agent and Messenger Users” on page 71.

	Linux Archive Agent	WIndows Archive Agent
Syntax:	--threads *number*	/threads-*number*
Example:	--threads 20	/threads-20

See also /maxconns.

/user

Provides the eDirectory user name for the Archive Agent to use when accessing eDirectory to obtain its configuration information from the Archive Agent object. This switch is required in order to start the Messaging Agent. See “Starting the Archive Agent” on page 65.

	Linux Archive Agent	Windows Archive Agent
Syntax:	--user CN=*User_object*, OU=*org_unit*,O=*organization*	/user-CN=*User_object*, OU=*org_unit*,O=*organization*
Example:	--user CN=Messenger, OU=Users,O=Novell	/user-CN=Messenger, OU=Users,O=Novell

IMPORTANT: Use commas, rather than periods, between object names. If any object name includes a space, surround the switch value with double quotation marks.

See also /password.

6 Managing Chat Rooms

You can create chat rooms for users to participate in, or you can allow them to create their own chat rooms. When you initially create your Messenger system, there are no chat rooms. In order for users to start using chat rooms, you must to do some additional system setup, as described in the following sections:

- "Creating Chat Rooms" on page 87
- "Editing Chat Room Settings" on page 88
- "Allowing or Blocking Chat Room Access" on page 90
- "Allowing Users to Create Chat Rooms" on page 90

Creating Chat Rooms

There are two ways to create a chat room: in the client interface and in the GroupWise Admin Console.

- "Creating a Chat Room in the GroupWise Admin Console" on page 87
- "Creating a Chat Room in the Client" on page 87

Creating a Chat Room in the GroupWise Admin Console

- ❒ In the GroupWise Admin console **> Messenger > MessengerService > Chats**, select **New**.
- ❒ Enter a name, display name, and owner for the chat room and choose if the chat room is searchable.

  The chat room is created; however, you might want to change some additional settings after creation. For more information about editing chat room settings, see "Editing Chat Room Settings In the GroupWise Admin Console" on page 88.
- ❒ To make the chat room visible, you must restart the Messaging Agent.

Creating a Chat Room in the Client

Both administrators and users can create chat rooms in the client. However, users must be granted access in the GroupWise Admin console before they can create a chat room. For information on how to allow users to create chat rooms in the client, see "Allowing Users to Create Chat Rooms" on page 90.

- Click **Tools** > **Chat Rooms**, then click **Create**.
- (Optional) Select the owner of the chat room.

  By default, the owner is the user who is creating the chat room.
- Type the chat room name.
- (Optional) Type a description and a welcome message for the chat room.
- (Optional) Select the maximum number of participants.

- (Optional) Select if you want to archive the chat room.
- (Optional) Select if you want the chat room to be searchable.
- (Optional) Click the **Access** tab, then select the access rights for all users and a particular user.
- Click **OK** to create the chat room.

Editing Chat Room Settings

You can edit the chat room settings either in the GroupWise Admin console or in the client interface. Users can modify chat room settings in the client interface if they have been granted access to do so. For information on how to allow users to create and edit chat rooms in the client, see "Allowing Users to Create Chat Rooms" on page 90.

- "Editing Chat Room Settings In the GroupWise Admin Console" on page 88
- "Editing Chat Room Settings in the Client" on page 89

Editing Chat Room Settings In the GroupWise Admin Console

In the GroupWise Admin console, you can change the general settings and the access settings for a chat room.

- "General Settings" on page 88
- "Access Settings" on page 88

General Settings

- [ ] In the GroupWise Admin console **> Messenger > MessengerService > Chats**, select a chat room to edit.
- [ ] Edit the following settings as desired:
  - Display name
  - Owner
  - Description
  - Disclaimer
  - Max Users
  - Archive messages in this chat
  - Chat room is searchable
- [ ] Click **Save**.

Access Settings

- [ ] In the GroupWise Admin console **> Messenger > MessengerService > Chats**, select a chat room to edit.
- [ ] Select the **Access Control** tab.
- [ ] By default, general user access is displayed in the access list. To add another user to the access list, click **Add**.

- ❒ Browse to and select the user.
- ❒ Select the access rights for the user.

  View: Allows the user to view the chat room.

  Send: Allows the user to send a message to the chat room.

  Modify Rights: Allows the user to modify the rights to the chat room.

  Moderator: Allows the moderator to delete a user and change the topic of the chat room.
- ❒ (Optional) Click **Set Password** to set a password for the chat room.

  This requires users to enter a password to join the chat room. There is only one password for all participants in the chat room.
- ❒ Click **Save**.

Editing Chat Room Settings in the Client

In the client, you can change the general settings and the access settings for the chat room.

- "General Settings" on page 89
- "Access Settings" on page 89

General Settings

Users can edit the settings for a chat room only if the administrator has granted access to create chat rooms. The default access does not allow users to create or edit a chat room.

For information on allowing users to create and edit chat rooms, see "Allowing Users to Create Chat Rooms" on page 90.

- ❒ Click **Tools** > **Chat Rooms**, select the chat room to edit, then click **Properties**.
- ❒ (Optional) Select the owner of the chat room.

  By default, the owner is the user who is creating the chat room.
- ❒ Type the chat room name.
- ❒ (Optional) Type a description and a welcome message for the chat room.
- ❒ (Optional) Select the maximum number of participants.
- ❒ (Optional) Select if you want to archive the chat room.
- ❒ (Optional) Select if you want the chat room to be searchable.
- ❒ (Optional) Click the **Access** tab, then select the access rights for all users and a particular user.
- ❒ Click **OK** to save the settings.

Access Settings

You can modify the access rights for a chat room if you have been granted rights to do so.

- ❒ Click **Tools** > **Chat Rooms**, select the chat room to modify, then click **Properties**.
- ❒ By default, general user access is displayed in the access list. To add another user to the access list, click **Find User**.

- Type the user's name in the **Name** field, then click **Next**.
- Select the user in the list, then click **Finish**.
- Select the access rights for the user:

  View: Allows the user to view the chat room.

  Send: Allows the user to send a message to the chat room.

  Modify Rights: Allows the user to modify the rights to the chat room.

  Moderator: Allows the moderator to delete a user and change the topic of the chat room.
- Click **Set Password** to set a password for the chat room.

  This requires users to enter a password to join the chat room. There is only one password for all participants in the chat room.
- Click **OK** or **Apply** to save the settings.

Allowing or Blocking Chat Room Access

By default, users are allowed to use chat rooms. However, you can disable this functionality for all users, for a user policy, or for a certain user.

- In the GroupWise Admin console **> Messenger > MessengerService >** select either the default policy (all users), a user policy (users governed by the policy), or a user.
- Select or deselect **Allow Users to Use Chat Rooms**.
- Click **Save**.

Allowing Users to Create Chat Rooms

By default, users are not allowed to create chat rooms. However, you can enable this functionality for all users, for a user policy, or for a certain user.

- In the GroupWise Admin console **> Messenger > MessengerService >** select either the default policy (all users), a user policy (users governed by the policy), or a user, then click **Properties**.
- Select **Allow users to create chat rooms**.
- Click **Save**.
- Restart the Messaging Agent to make the option visible to users.

7 Integrating Micro Focus Vibe with GroupWise Messenger

When you integrate GroupWise Messenger with your Micro Focus Vibe system, Vibe users can see GroupWise Messenger presence information directly from the Vibe interface.

To set up this integration, create a new user with limited rights. Then, make this user the new Allowed Service User who is responsible for displaying Messenger presence information in Vibe:

- ❒ Create a new Messenger user and give this user a user name and password.

  For information about how to create a new Messenger user, see “Adding Users to Your Messenger System” on page 35.
- ❒ In the GroupWise Admin console **> Messener > MessengerService > Settings > Service ACL**, select **Add**, then add the user you created in the previous step.
- ❒ Add the user to the Micro Focus Vibe installation following the steps found in Configuring Presence in the *Micro Focus Vibe 4.0.3 Installation Guide*.

8 Securing GroupWise Messenger

This section provides specific instructions on how to install, configure, and maintain GroupWise Messenger 18 in the most secure way possible.

- "Limiting Physical Access to Messenger Servers" on page 93
- "Limiting Physical Access to Client Workstations" on page 93
- "Securing File System Access" on page 93
- "Securing the Messenger Agents" on page 94
- "Securing the Messenger System" on page 96

Limiting Physical Access to Messenger Servers

Servers where Messenger data resides should be kept physically secure so that unauthorized persons cannot gain access to the server consoles.

Limiting Physical Access to Client Workstations

Beginning with Messenger 3.0, Messenger supports multiple client connections. This means that a user can be connected to the Messenger system on the workstation in their office, while at the same time being connected from their laptop and mobile phone.

This might be viewed as a potential security concern because another user could access sensitive information on an unattended device or even masquerade as the real user by sending messages from the device. In previous versions of Messenger this wasn't as much of a concern because only one connection was allowed at a time, so connecting to Messenger on one device would disconnect Messenger on the device where it was already running.

If you feel that allowing multiple simultaneous client connections to your Messenger system is a security concern, you can disable this ability:

- ❒ In the GroupWise Admin Console **> Messenger >** , right-click either the default policy (all users), a user policy (users governed by the policy), or a user, then click **Properties**.
- ❒ Deselect **Enable users to connect to multiple clients simultaneously**.
- ❒ Click **OK** to save the settings.

For more information about editing the user policy settings, see "Editing the Default User Policy" on page 38.

Securing File System Access

In the GroupWise Admin console, Server objects for servers where Messenger agents reside should be assigned appropriate trustees and rights to prevent access from unauthorized persons.

For additional data security, encrypted file systems should be used on servers where Messenger agents and archives reside.

Securing the Messenger Agents

- "Updating SSL Certificates for the Messenger Agents" on page 94
- "Enabling SSL for the Web Console" on page 94
- "Enabling Password Protection for the Web Console" on page 94
- "Securing the Data Files" on page 94

Updating SSL Certificates for the Messenger Agents

SSL is enabled by default during the install. You can use your own certificates or have Messenger create the certificates for you. You can update the certificates for Messenger in the GroupWise Admin console **> Messenger > MessengerService > Objects > Servers >** select your server **> SSL Settings**. You can then upload new certificates to Messenger.

Enabling SSL for the Web Console

The Web Console should already be configured to use SSL when SSL is configured during the installation. However, additional configuration is needed to enable SSL for the Web Console. For information on how to secure and configure the Web Console, see "Setting Up the Messaging Agent Web Console" on page 17 and "Using the Archive Agent Web Console and GroupWise Monitor" on page 70.

Enabling Password Protection for the Web Console

The Web Console should be configured to use SSL and password protection, but password protection needs to be enabled. For information on how to enable password protection for the Web Console, see "Setting Up the Messaging Agent Web Console" on page 17 and "Using the Archive Agent Web Console and GroupWise Monitor" on page 70.

Securing the Data Files

- "Securing the Data Store" on page 94
- "Securing the Queue Files" on page 95
- "Securing the Log Files" on page 95
- "Securing the Startup Files" on page 95
- "Securing the Root Certificate" on page 96

Securing the Data Store

The data store files should be protected from access by unauthorized persons. The data store files are identified by an eight-digit hexadecimal number followed by either `.maf` or `.mai`. They are found in the following default locations:

Table 8-1 Messenger Data Store File Locations

Platform	Directory	Store Files
Linux	/var/opt/novell/messenger/aa/store	*xxxxxxxx*.maf *xxxxxxxx*.mai
Windows	C:\Novell\NM\aa\store	*xxxxxxxx*.maf *xxxxxxxx*.mai

Securing the Queue Files

The queue files should be protected from access by unauthorized persons. The queue files are identified by an eight-digit hexadecimal number followed by three numbers. They are found in the following default locations:

Table 8-2 Messenger Queue File Locations

Platform	Directory	Queue Files
Linux	/var/opt/novell/messenger/ma/queue /var/opt/novell/messenger/aa/queue	*xxxxxxxx.nnn*
Windows	C:\Novell\NM\ma\queue C:\Novell\NM\aa\queue	*xxxxxxxx.nnn*

Securing the Log Files

The log files for all Messenger agents should be protected from access by unauthorized persons. Some contain very detailed information about your Messenger system and Messenger users. They are found in the following default locations:

Table 8-3 Messenger Agent Log File Locations

Platform	Directory	Log Files
Linux	/var/opt/novell/log/messenger/ma/ /var/opt/novell/log/messenger/aa	*mmdd*nma.*nnn* *mmdd*naa.*nnn*
Windows	C:\Novell\MA\logs C:\Novell\AA\logs	*mmdd*nma.*nnn* *mmdd*naa.*nnn*

Securing the Startup Files

The startup files for all Messenger agents should be protected from access by unauthorized persons. They are found in the following default locations:

Table 8-4 Messenger Agent Startup File Locations

Platform	Directory	Startup Files
Linux	`/etc/init.d`	`novell-nmma` `novell-nmaa`
Windows	`C:\Novell\NM\ma` `C:\Novell\NM\aa`	`strtup.ma` `strtup.aa`

Securing the Root Certificate

The root certificate files should be protected from access by unauthorized persons. The root certificate files are copied to the following default locations:

Table 8-5 Root Certificate File Locations

Platform	Directory	Startup Files
Linux	`/opt/novell/messenger/certs`	*certname*.der
Windows	`C:\Novell\NM\certs`	*certname*.der

Securing the Messenger System

- "Configuring Remember Passwords" on page 96
- "Understanding History and Save Conversation Security" on page 96

Configuring Remember Passwords

Messenger can be configured to remember passwords for the client login. However, this can cause security concerns. If a workstation is left unlocked, anyone can log in as that user if the Remember Password setting is selected. In addition, some third-party software packages might store the passwords in plain text.

For security reasons, the ability to remember passwords should be disabled. For information on how to disable the Remember Password option, see "Customizing Messenger Client Features" on page 39.

Understanding History and Save Conversation Security

- "History Security" on page 96
- "Saved Conversation Security" on page 97

History Security

When the history option is enabled, the history files are stored on the client workstation in the following locations by default:

Table 8-6 *Default History File Locations*

Operating System	Location
Windows	`C:\Documents and Settings\`*`username`*`\Local Settings\Application Data\Novell\Messenger\history`
Linux	`/home/`*`username`*`/.novell//messenger/history`
Macintosh	`/User/`*`username`*`/.novell/messenger/history`

The history files are stored as XML files, so anyone with access to the machine can view the files. For maximum security, the History option should be disabled. For information on how to disable the History option, see "Customizing Messenger Client Features" on page 39.

Saved Conversation Security

A saved conversation is stored as a text file, so anyone with access to the machine can view the file. For maximum security, the ability to save conversations should be disabled. For information on how to do this, see "Customizing Messenger Client Features" on page 39.